cgl@mail:/$ echo "Install the MTA package"
Install the MTA package
cgl@mail:/$ echo "Also install the command line MUA package"
Also install the command line MUA package
cgl@mail:/$
cgl@mail:/$ sudo apt-get install exim4 mailutils
Now configure the MTA for my site.

I will receive email directly from the internet, but use a smarthost send through the campus firewall.

The system has the IP address 144.38.214.132, and the name mail.dsutux.us.
cgl@mail:/$ sudo dpkg-reconfigure exim4-config
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).
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>
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>
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>
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.dsutux.us
```

<Ok>  <Cancel>
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.
Mail Server configuration

IP-addresses to listen on for incoming SMTP connections:

127.0.0.1 ; ::1

<Ok> <Cancel>
Mail Server configuration

IP-addresses to listen on for incoming SMTP connections:

127.0.0.1 ; ::1 ; 144.38.214.132

<Ok> <Cancel>
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 (mail.dsutux.us) 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:

<table>
<thead>
<tr>
<th>mail.dsutux.us</th>
</tr>
</thead>
</table>

<Ok>  <Cancel>
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 (mail.dsutux.us) 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.dsutux.us ; dsutux.us

<Ok> <Cancel>
Mail Server configuration

Please enter a semicolon-separated list of IP address ranges for which this system will unconditionally relay mail, functioning as a smarthost.

You should use the standard address/prefix format (e.g. 194.222.242.0/24 or 5f03:1200:836f::/48).

If this system should not be a smarthost for any other host, leave this list blank.

Machines to relay mail for:

<Ok> <Cancel>
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:

```
mail.mail.dsutux.us
```

<Ok>         <Cancel>
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>
Mail Server configuration

The headers of outgoing mail can be rewritten to make it appear to have been generated on a different system. If this option is chosen, 'mail.dsutux.us', 'localhost' and 'mail.dsutux.us ; dsutux.us' in From, Reply-To, Sender and Return-Path are rewritten.

Hide local mail name in outgoing mail?

<Yes>    <No>
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.
Package configuration

Mail Server configuration

Keep number of DNS-queries minimal (Dial-on-Demand)?

<Yes> <No>
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
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>
cgl@mail:/$ sudo dpkg-reconfigure exim4-config
* Stopping MTA for restart
* Restarting MTA
[ OK ]
[ OK ]
cgl@mail:/$
cgl@mail:/$ echo "The configurations just entered are stored in a configuration file in /etc/exim4"
The configurations just entered are stored in a configuration file in /etc/exim4
cgl@mail:/$
# 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.dsutux.us ; dsutux.us'
dc_local_interfaces='127.0.0.1 ; ::1 ; 144.38.214.132'
dc_readhost=''
dc Relay_domains=''
dc_minimaldns='false'
dc Relay Nets=''
dc_smarthost='stumail.cs.dixie.edu'
CFMODE='644'
dc_use_split_config='false'
dc_hide_mailname='false'
dc_mailname_in_oh='true'
dc Localdelivery='mail_spool'
cgl@mail:/$
cgl@mail:/$ echo "If you know what you are doing, you can edit that file manually, and run the `update-exim4.conf` command to install those changes."
If you know what you are doing, you can edit that file manually, and run the `update-exim4.conf` command to install those changes.
cgl@mail:/$
cgl@mail:/$ echo "The log files for exim4 are stored in /var/log/exim4."
The log files for exim4 are stored in /var/log/exim4.
cgl@mail:/$
cgl@mail:/$ sudo ls -l /var/log/exim4
total 4
-rw-r----- 1 Debian-exim adm 418 Sep 17 05:41 mainlog
cgl@mail:/$
cgl@mail:/$ echo "mainlog stores most day-to-day information for exim4."
mainlog stores most day-to-day information for exim4.
cgl@mail:/$ echo "paniclog is created if your configuration is incorrect enough
to stop exim4 from restarting."
paniclog is created if your configuration is incorrect enough to stop exim4 from
restarting.
cgl@mail:/$ echo "rejectlog is created when exim4 refuses to relay or store a mes-
ssage for any reason."
rejectlog is created when exim4 refuses to relay or store a message for any reason.
cgl@mail:/$
cgl@mail:/$ sudo cat /var/log/exim4/mainlog
2014-09-17 05:35:02 exim 4.82 daemon started: pid=3088, -q30m, listening for SMTP P on [127.0.0.1]:25 [::1]:25
2014-09-17 05:35:02 Start queue run: pid=3091
2014-09-17 05:35:02 End queue run: pid=3091
2014-09-17 05:41:19 exim 4.82 daemon started: pid=3800, -q30m, listening for SMTP P on [127.0.0.1]:25 [::1]:25 [144.38.214.132]:25
2014-09-17 05:41:19 Start queue run: pid=3802
2014-09-17 05:41:19 End queue run: pid=3802

cgl@mail:/$
cgl@mail:/$ echo "Only start/stop messages right now. In a few minutes, we'll send some messages and generate more log messages."
Only start/stop messages right now. In a few minutes, we'll send some messages and generate more log messages.
cgl@mail:/$
cgl@ns1:/$ echo "On the DNS authoritative master now."
On the DNS authoritative master now.
cgl@ns1:/$ echo "Need to add DNS records to send all email messages to the MTA"
Need to add DNS records to send all email messages to the MTA
cgl@ns1:/$
cgl@ns1:/$ sudo emacs /etc/bind/db.dsutux.us
; MX (Mail eXchange) records
; The following entry will cause MTAs to send messages addressed
; to user@dsutux.us to the mail.dsutux.us 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, this record directs messages for user@mail.dsutux.us
; to mail.dsutux.us also.
mail   IN     MX      10     mail

; A (Address) records
;
ns1    IN     A       144.38.214.130
ns2    IN     A       144.38.214.131
mail   IN     A       144.38.214.132
www    IN     A       144.38.214.133
for updated information.

- How often the secondary (slave) name servers should retry
  the refresh, if the refresh is unsuccessful.
- How long secondary (slave) name servers should keep and serve
  this zone information before it is discarded.
- How long negative hits should be stored. This is for caching
  lookup servers that ask our authoritative server for
  non-existent RR. This tells how long to cache the
  negative response.

@ IN SOA ns1.dsutux.us. root.ns1.dsutux.us. (2014091701) ; Serial
           3600 ; Refresh
           300 ; Retry
       241920 ; Expire
            60 ) ; Negative cache TTL

NS (Name Server) records

@ IN NS ns1.dsutux.us.
@ IN NS ns2.dsutux.us.
cgl@ns1:/$ sudo service bind9 restart
  * Stopping domain name service... bind9
  waiting for pid 3509 to die

  * Starting domain name service... bind9

  [ OK ]
  [ OK ]

cgl@ns1:/$
cgl@ns1:$ echo "Check if the zone file loaded correctly."
Check if the zone file loaded correctly.
cgl@ns1:$
cgl@ns1:$
cgl@ns1:$ grep 'zone dsutux.us' /var/log/syslog | tail
Sep 16 23:25:20 ns1 named[3509]: zone dsutux.us/IN: loaded serial 2014091601
Sep 16 23:25:20 ns1 named[3509]: zone dsutux.us/IN: sending notifies (serial 2014091601)
Sep 17 05:53:38 ns1 named[3782]: zone dsutux.us/IN: loaded serial 2014091701
Sep 17 05:53:38 ns1 named[3782]: zone dsutux.us/IN: sending notifies (serial 2014091701)
cgl@ns1:$
cgl@ns1:$
cgl@ns1:$ date
Wed Sep 17 05:55:34 MDT 2014
cgl@ns1:$
cgl@ns1:$ echo "Loaded fine just now"
Loaded fine just now
cgl@ns1:$  ```
cgl@ns1:/$ echo "Do dig commands to check if the translation is working"
Do dig commands to check if the translation is working
cgl@ns1:/$
cgl@ns1:/$ dig @144.38.214.130 dsutux.us MX | grep MX
; <<>> DiG 9.9.5-3-Ubuntu <<>> @144.38.214.130 dsutux.us MX
dsutux.us. IN MX
3600 IN MX 10 mail.dsutux.us.
cgl@ns1:/$ dig @144.38.214.130 mail.dsutux.us MX | grep MX
; <<>> DiG 9.9.5-3-Ubuntu <<>> @144.38.214.130 mail.dsutux.us MX
mail.dsutux.us. IN MX
3600 IN MX 10 mail.dsutux.us.
cgl@ns1:/$
cgl@ns1:/$ echo "Check the slave too."
Check the slave too.
cgl@ns1:/$
cgl@ns1:/$ dig @144.38.214.131 dsutux.us MX | grep MX
; >>>> DiG 9.9.5-3-Ubuntu <<<> @144.38.214.131 dsutux.us MX
;dsutux.us. IN MX
dsutux.us. 3600 IN MX 10 mail.dsutux.us.
cgl@ns1:/$ dig @144.38.214.131 mail.dsutux.us MX | grep MX
; >>>> DiG 9.9.5-3-Ubuntu <<<> @144.38.214.131 mail.dsutux.us MX
;mail.dsutux.us. IN MX
mail.dsutux.us. 3600 IN MX 10 mail.dsutux.us.
cgl@ns1:/$
cgl@ns1:/$ echo "Check caching lookup servers."
Check caching lookup servers.
cgl@ns1:/$
cgl@ns1:/$ dig @144.38.1.2 dsutux.us MX | grep MX
; <<< DiG 9.9.5-3-Ubuntu <<< @144.38.1.2 dsutux.us MX
dsutux.us.
    IN    MX
   3600  IN    MX    10 mail.dsutux.us.
cgl@ns1:/$ dig @144.38.1.2 dsutux.us MX | grep MX
; <<< DiG 9.9.5-3-Ubuntu <<< @144.38.1.2 dsutux.us MX
dsutux.us.
    IN    MX
   3597  IN    MX    10 mail.dsutux.us.
cgl@ns1:/$ dig @144.38.1.2 mail.dsutux.us MX | grep MX
; <<< DiG 9.9.5-3-Ubuntu <<< @144.38.1.2 mail.dsutux.us MX
mail.dsutux.us.
    IN    MX
   3600  IN    MX    10 mail.dsutux.us.
cgl@ns1:/$ dig @144.38.1.2 mail.dsutux.us MX | grep MX
; <<< DiG 9.9.5-3-Ubuntu <<< @144.38.1.2 mail.dsutux.us MX
mail.dsutux.us.
    IN    MX
   3597  IN    MX    10 mail.dsutux.us.
cgl@ns1:/$
cgl@ns1:/$ echo "OK. DNS appears to be configured for mail delivery."
OK. DNS appears to be configured for mail delivery.
cgl@ns1:/$
cgl@mail:/$ echo "Back on the MTA system now."
Back on the MTA system now.
cgl@mail:/$ echo ""

cgl@mail:/$ echo "Now, we want to send and receive emails to verify functionality."
Now, we want to send and receive emails to verify functionality.
cgl@mail:/$  

cgl@mail:/$ echo "Create a couple of users to do testing with."
Create a couple of users to do testing with.
cgl@mail:/$
cgl@mail:/\$ sudo adduser alice
Adding user `alice' ...
Adding new group `alice' (1001) ...
Adding new user `alice' (1001) 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]
cgl@mail:/$ sudo adduser bob
Adding user `bob' ...
Adding new group `bob' (1002) ...
Adding new user `bob' (1002) 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]
cgl@mail:/$
cgl@mail:/$ echo "Alice will now send a test message to bob, all on the local machine."
Alice will now send a test message to bob, all on the local machine.
cgl@mail:/$ su - alice
Password:
alice@mail:~$ mailx bob
Cc:
Subject: Local -> Local
Bob,
Hello from mail.dsutux.us to mail.dsutux.us.
- Alice
alice@mail:~$ echo "Message terminated with Ctrl-D"
Message terminated with Ctrl-D
alice@mail:~$
cgl@mail:/$ echo "The message should be stored in Bob's mail box now."
The message should be stored in Bob's mail box now.
cgl@mail:/$ echo "There should be a record of this transaction in mainlog."
There should be a record of this transaction in mainlog.
cgl@mail:/$
cgl@mail:/
$ sudo cat /var/log/exim4/mainlog
2014-09-17 05:35:02 exim 4.82 daemon started: pid=3088, -q30m, listening for SMTP P on [127.0.0.1]:25 [::1]:25
2014-09-17 05:35:02 Start queue run: pid=3091
2014-09-17 05:35:02 End queue run: pid=3091
2014-09-17 05:41:19 exim 4.82 daemon started: pid=3800, -q30m, listening for SMTP P on [127.0.0.1]:25 [::1]:25 [144.38.214.132]:25
2014-09-17 05:41:19 Start queue run: pid=3802
2014-09-17 05:41:19 End queue run: pid=3802
2014-09-17 06:02:26 1XUDwI-00010l-2u <= alice@mail.dsutux.us U=alice P=local S=439
2014-09-17 06:02:26 1XUDwI-00010l-2u => bob <bob@mail.dsutux.us> R=local_user T=mail_spool
2014-09-17 06:02:26 1XUDwI-00010l-2u Completed
cgl@mail:/$
cgl@mail:/$ ls -l /var/spool/mail/
total 4
-rw-rw---- 1 bob mail 606 Sep 17 06:02 bob
cgl@mail:/$
cgl@mail:/$ echo "Bob will now read his message."
Bob will now read his message.
cgl@mail:/$ su - bob
Password:
bob@mail:~$ mailx
"/var/mail/bob": 1 message 1 new
>N  1 alice@mail.dsutux. Wed Sep 17 06:02 17/554 Local -> Local
cgl@mail:/$ echo "Bob will now read his message."
Bob will now read his message.
cgl@mail:/$ su - bob
Password:
bob@mail:~$ mailx
"/var/mail/bob": 1 message 1 new
> N 1 alice@mail.dsutux. Wed Sep 17 06:02 17/554 Local -> Local
? 1
cgl@mail:/$ su - bob
Password:
bob@mail:~$ mailx
"/var/mail/bob": 1 message 1 new
> 1 alice@mail.dsutux. Wed Sep 17 06:02 17/554 Local -> Local
? 1
Return-path: <alice@mail.dsutux.us>
Envelope-to: bob@mail.dsutux.us
Delivery-date: Wed, 17 Sep 2014 06:02:26 -0600
Received: from alice by mail.dsutux.us with local (Exim 4.82)
    (envelope-from <alice@mail.dsutux.us>)
    id 1XUDwI-00010l-2u
for bob@mail.dsutux.us; Wed, 17 Sep 2014 06:02:26 -0600
To: <bob@mail.dsutux.us>
Subject: Local -> Local
X-Mailer: mail (GNU Mailutils 2.99.98)
Message-Id: <E1XUDwI-00010l-2u@mail.dsutux.us>
From: alice@mail.dsutux.us
Date: Wed, 17 Sep 2014 06:02:26 -0600

Bob,
Hello from mail.dsutux.us to mail.dsutux.us.
- Alice

To: <bob@mail.dsutux.us>
Subject: Local -> Local
X-Mailer: mail (GNU Mailutils 2.99.98)
Message-Id: <E1XDwI-00010l-2u@mail.dsutux.us>
From: alice@mail.dsutux.us
Date: Wed, 17 Sep 2014 06:02:26 -0600

Bob,
Hello from mail.dsutux.us to mail.dsutux.us.
- Alice

? d1
? q
Held 0 messages in /var/mail/bob
bob@mail:$
Now, Alice will send to a remote email address.
cgl@mail:/$ su - alice
Password:
alice@mail:~$ mailx larsen@dixie.edu
Cc:
Subject: Local -> Remote
Larsen,
Hello. Did you get this?
Let me know if you didn't.
- Alice
alice@mail:~$ echo "Remember Ctrl-D to end message"
Remember Ctrl-D to end message
alice@mail:~$
cgl@mail:/$ echo "This message should also be logged in mainlog."
This message should also be logged in mainlog.
cgl@mail:/$
cgl@mail:/$ sudo cat /var/log/exim4/mainlog
2014-09-17 05:35:02 exim 4.82 daemon started: pid=3088, -q30m, listening for SMTP
P on [127.0.0.1]:25 [:0]:25
2014-09-17 05:35:02 Start queue run: pid=3091
2014-09-17 05:35:02 End queue run: pid=3091
2014-09-17 05:41:19 exim 4.82 daemon started: pid=3800, -q30m, listening for SMTP
P on [127.0.0.1]:25 [:0]:25 [144.38.214.132]:25
2014-09-17 05:41:19 Start queue run: pid=3802
2014-09-17 05:41:19 End queue run: pid=3802
2014-09-17 06:02:26 1XUDwI-00010l-2u <= alice@mail.dsutux.us U=alice P=local S=439
2014-09-17 06:02:26 1XUDwI-00010l-2u => bob <bob@mail.dsutux.us> R=local_user T=mail_spool
2014-09-17 06:02:26 1XUDwI-00010l-2u Completed
2014-09-17 06:06:41 1XUE0P-00011Z-M0 <= alice@mail.dsutux.us U=alice P=local S=447
2014-09-17 06:06:41 1XUE0P-00011Z-M0 => larsen@dixie.edu R=smarthost T=remote_smtp_smarthost H=stumail.cs.dixie.edu [144.38.192.231] C="250 OK id=1XUE0h-0001eT-Fc"
2014-09-17 06:06:41 1XUE0P-00011Z-M0 Completed

cgl@mail:/$
cgl@mail:/$ echo "Now, check that the message was received."
Now, check that the message was received.
cgl@mail:/$
Local -> Remote

DELETE  ← REPLY  ↔ REPLY ALL  → FORWARD

mark as unread

alice@mail.dsutux.us
Wed 9/17/2014 6:06 AM

To: Larsen, Curtis;

Larsen,
Hello. Did you get this?
Let me know if you didn’t.
- Alice
Local ->

To: Larsen, G

Larsen,

Hello. Did you receive my email? Let me know.
- Alice

Received: from ITS-HCCMB-02.sgc.local (144.38.54.12) by ITS-HCCMB-01.sgc.local (144.38.54.11) with Microsoft SMTP Server (TLS) id 15.0.847.32 via Mailbox
Transport: Wed, 17 Sep 2014 06:06:54 -0600
Received: from ITS-HCCMB-02.sgc.local (144.38.54.12) with Microsoft SMTP Server (TLS) id 15.0.847.32; Wed, 17 Sep 2014 06:06:53 -0600
Received: from mx1.dixie.edu (144.38.54.10) by ITS-HCCMB-02.sgc.local (144.38.54.12) with Microsoft SMTP Server id 15.0.847.32 via Frontend
Transport: Wed, 17 Sep 2014 06:06:53 -0600
X-ASG-Debug-ID: 1410955601-04bc803927d1cb30001-XeLL77
Received: from stumail.cs.dixie.edu (stumail.cs.dixie.edu)
message details

X-ASG-Debug-ID: 1410955601-04bc803927d1cb30001-XeLL77
Received: from stumail.cs.dixie.edu (stumail.cs.dixie.edu [144.38.192.231]) by
mx1.dixie.edu with ESMTP id q2D1R7e33pcC1Zh8 for
<larsen@dixie.edu>; Wed, 17
Sep 2014 06:06:41 -0600 (MDT)
X-Barracuda-Envelope-From: alice@mail.dsutux.us
X-Barracuda-Apparent-Source-IP: 144.38.192.231
Received: from [144.38.214.132] (helo=mail.dsutux.us) by
stumail.cs.dixie.edu
with esmtph (Exim 4.82) (envelope-from
<alice@mail.dsutux.us>) id
1XUE0h-0001eT-Fc for larsen@dixie.edu; Wed, 17 Sep 2014
06:06:59 -0600
Received: from alice by mail.dsutux.us with local (Exim 4.82)
(envelope-from
<alice@mail.dsutux.us>) id 1XUE0P-00011Z-M0 for
larsen@dixie.edu; Wed, 17 Sep 2014 06:06:59 -0600

Larsen,
Hello. Did you get my previous email?
Let me know.
-Alice
Larsen, 

Hello. Did you receive the email I sent this morning? Let me know if you have any questions.
- Alice

message details

Received: from alice by mail.dsutux.us with local (Exim 4.82)
(envelope-from <alice@mail.dsutux.us>) id 1XUE0P-00011Z-M0 for larsen@dixie.edu; Wed, 17 Sep 2014 06:06:41 -0600
To: <larsen@dixie.edu>
Subject: Local -> Remote
X-Mailer: mail (GNU Mailutils 2.99.98)
X-ASG-Orig-Subj: Local -> Remote
Message-ID: <E1XUE0P-00011Z-M0@mail.dsutux.us>
From: <alice@mail.dsutux.us>
Date: Wed, 17 Sep 2014 06:06:41 -0600
X-Barracuda-Connect: stumail.cs.dixie.edu[144.38.192.231]
X-Barracuda-Start-Time: 1410955601
X-Barracuda-URL: http://spam.dixie.edu:8000/cgi-mod/mark.cgi
X-Virus-Scanned: by bsmtpd at dixie.edu
Now send from a remote site to dsutux.us.
To: bob@dsutux.us;

Cc:

Subject: Remote -> Local

Hey Bob!
Isn't email great?
- Larsen
cgl@mail:$ echo "This transaction will be logged in mainlog when the MTA receives it."
This transaction will be logged in mainlog when the MTA receives it.
cgl@mail:$
cgl@mail:/$ sudo tail /var/log/exim4/mainlog
2014-09-17 06:02:26 1XUDwI-00010l-2u => bob <bob@mail.dsutux.us> R=local_user T=mail_spool
2014-09-17 06:02:26 1XUDwI-00010l-2u Completed
2014-09-17 06:06:41 1XUE0P-00011Z-M0 <= alice@mail.dsutux.us U=alice P=local S=447
2014-09-17 06:06:41 1XUE0P-00011Z-M0 => larsen@dixie.edu R=smtp T=remote_smtp_smarthost H=stumail.cs.dixie.edu [144.38.192.231] C="250 OK id=1XUE0h-0001e7-Fc"
2014-09-17 06:06:41 1XUE0P-00011Z-M0 Completed
2014-09-17 06:11:19 Start queue run: pid=3961
2014-09-17 06:11:19 End queue run: pid=3961
2014-09-17 06:14:05 1XUE7C-00011w-Rj <= Larsen@dixie.edu H=mx1.dixie.edu [144.38.1.10] P=esmtp S=3776 id=9def4b9d5514d9109a39cc2cbc2d1@ITS-HCCMB-01.sgc.local
2014-09-17 06:14:05 1XUE7C-00011w-Rj => bob <bob@dsutux.us> R=local_user T=mail_spool
2014-09-17 06:14:05 1XUE7C-00011w-Rj Completed
cgl@mail:/$
cgl@mail:/$ echo "It should be in bob's mailbox."
It should be in bob's mailbox.
cgl@mail:/$ ls -l /var/spool/mail/
total 4
-rw-rw-r-- 1 bob mail 3930 Sep 17 06:14 bob
cgl@mail:/$
cgl@mail:/$ echo "And bob should be able to read the message."
And bob should be able to read the message.
cgl@mail:/$ su - bob
Password:
bob@mail:~$ mailx
"/var/mail/bob": 1 message 1 new
> N   1 Larsen, Curtis   Wed Sep 17 06:14 94/3884 Remote -> Local
? 1
Return-path: <Larsen@dixie.edu>
Envelope-to: bob@dsutux.us
Delivery-date: Wed, 17 Sep 2014 06:14:08 -0600
Received: from mx1.dixie.edu ([144.38.1.10])
    by mail.dsutux.us with esmtp (Exim 4.82)
    (envelope-from <Larsen@dixie.edu>)
    id 1XUE7c-00011w-Rj
    for bob@dsutux.us; Wed, 17 Sep 2014 06:14:08 -0600
X-ASG-Debug-ID: 1410956031-04bc80780b9beaf0001-2cdcvM
Received: from ITS-SCCM-02.sgc.local (mail.dixie.edu [144.38.54.14]) by mx1.dixie.edu with ESMTP id eOZgMNUctBX54fj for <bob@dsutux.us>; Wed, 17 Sep 2014 06:13:51 -0600 (MDT)
X-Barracuda-Envelope-From: Larsen@dixie.edu
X-Barracuda-Apparent-Source-IP: 144.38.54.14
Received: from ITS-HCCMB-01.sgc.local (144.38.54.11) by ITS-SCCM-02.sgc.local (144.38.54.14) with Microsoft SMTP Server (TLS) id 15.0.847.32; Wed, 17 Sep 2014 06:13:50 -0600
Received: from ITS-SCCM-01.sgc.local ([144.38.55.11]) by ITS-HCCMB-01.sgc.local ([144.38.55.11]) with mapi id 15.00.0847.030; Wed, 17 Sep 2014 06:13:50 -0600
From: "Larsen, Curtis" <Larsen@dixie.edu>
To: "bob@dsutux.us" <bob@dsutux.us>
Subject: Remote -> Local

--More--
Thread-Topic: Remote -> Local
X-ASG-Orig-Subj: Remote -> Local
Thread-Index: AQHPOnCshhCfWPilOUWE9f7JlgJAE=
Date: Wed, 17 Sep 2014 12:13:49 +0000
Message-ID: <9def4b965d5140af9109a39cc2cbc2d1@ITS-HCCMB-01.sgc.local>
Accept-Language: en-US
Content-Language: en-US
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
x-originating-ip: [144.38.54.10]
Content-Type: multipart/alternative;
boundary="_000_9def4b965d5140af9109a39cc2cbc2d1ITSHCCMB01sgclocal"
MIME-Version: 1.0
X-Barracuda-Connect: mail.dixie.edu[144.38.54.14]
X-Barracuda-Start-Time: 1410956031
X-Barracuda-URL: http://spam.dixie.edu:8000/cgi-mod/mark.cgi
X-Virus-Scanned: by bsmpd at dixie.edu
X-Barracuda-BRTS-Status: 1
X-Barracuda-Spam-Score: 0.00
X-Barracuda-Spam-Status: No, SCORE=0.00 using per-user scores of TAG_LEVEL=1000.0 QUARANTINE_LEVEL=1000.0 KILL_LEVEL=9.0 tests=HTML_MESSAGE
X-Barracuda-Spam-Report: Code version 3.2, rules version 3.2.3.9580
Rule breakdown below

--More--
<table>
<thead>
<tr>
<th>pts rule name</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 HTML_MESSAGE</td>
<td>BODY: HTML included in message</td>
</tr>
</tbody>
</table>

```text
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Hey Bob!

Isn't email? great?

- Larsen
```

```html
<html>
<head>
<meta http-equiv=3D"Content-Type" content=3D"text/html; charset=3Dus-ascii"=--More--
```
Hey Bob!

Isn't email #8203; great?

- Larsen
cgl@mail:/\$ echo "Finally, send to mail.dsutux.us to be sure that is received as well."
Finally, send to mail.dsutux.us to be sure that is received as well.
cgl@mail:/\$
To: alice@mail.dsutux.us

Subject: Remote -> Local (mail.dsutux.us)

Alice,
Hope this message finds you well.
- Larsen
Looking a mainlog

cgl@mail:/$/ echo "Looking a mainlog"
Looking a mainlog
cgl@mail:/$/ sudo tail /var/log/exim4/mainlog
2014-09-17 06:06:41 1XUE0P-00011Z-M0 => larsen@dixie.edu R=smarthost T=remote_smtp_smarthost H=stumail.cs.dixie.edu [144.38.192.231] C="250 OK id=1XUE0h-0001eT-Fc"
2014-09-17 06:06:41 1XUE0P-00011Z-M0 Completed
2014-09-17 06:11:19 Start queue run: pid=3961
2014-09-17 06:11:19 End queue run: pid=3961
2014-09-17 06:14:08 1XUE7c-00011w-Rj <= Larsen@dixie.edu H=mx1.dixie.edu [144.38.1.10] P=esmtph S=3776 id=9def4b965d5140af9109a39cc2cbc2d1@ITS-HCCMB-01.sgc.local
2014-09-17 06:14:08 1XUE7c-00011w-Rj => bob <bob@dsutux.us> R=local_user T=mail_spool
2014-09-17 06:14:08 1XUE7c-00011w-Rj Completed
2014-09-17 06:18:30 1XUEBq-00012c-B4 <= Larsen@dixie.edu H=mx1.dixie.edu [144.38.1.10] P=esmtph S=3888 id=241d03a29e38485b8e405bcd94f3c36f@ITS-HCCMB-01.sgc.local
2014-09-17 06:18:30 1XUEBq-00012c-B4 => alice <alice@mail.dsutux.us> R=local_user
2014-09-17 06:18:30 1XUEBq-00012c-B4 Completed

cgl@mail:/$
cgl@mail:/$ echo "Alice reads the message."
Alice reads the message.
cgl@mail:/$ su - alice
Password:
alice@mail:~$ mailx
"/var/mail/alice": 1 message 1 new
> N 1 Larsen, Curtis  Wed Sep 17 06:18  94/4003  Remote -> Local (mail.dsu
? 1]
pts rule name    description
-------------------

0.00  HTML_MESSAGE       BODY: HTML included in message

---_000_241d03a29e38485b8e405bcd94f3c36fITSHCCMB01sgclocal_
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Alice,

Hope this message finds you well.?

- Larsen

---_000_241d03a29e38485b8e405bcd94f3c36fITSHCCMB01sgclocal_
Content-Type: text/html; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

<html>
<head>
<meta http-equiv=3D"Content-Type" content=3D"text/html; charset=3Dus-ascii"= 

--More--
Alice,

Hope this message finds you well.?

- Larsen

Held 0 messages in /var/mail/alice
alice@mail:~$
cgl@mail:/$ echo "OK. The system appears to be working correctly for now."
OK. The system appears to be working correctly for now.
cgl@mail:/$
Here are a couple of quick checks on the exim4 process.

```bash
cgl@mail:/$
cgl@mail:/$ echo "This should show you the running process."
This should show you the running process.
cgl@mail:/$
cgl@mail:/$ ps aux | grep exim4
```

Debian++ 3800 0.0 0.4 50092 1136 ?  Ss 05:41 0:00 /usr/sbin/exim4 
-bd -q30m
cgl 4035 0.0 0.3 11744 896 pts/0 S+ 06:20 0:00 grep --color=auto
to exim4
cgl@mail:/$
```
cgl@mail:/$ echo "This should show you that port 25 (the SMTP port) is open by exim4"
This should show you that port 25 (the SMTP port) is open by exim4
cgl@mail:/$ sudo netstat -natp
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address       Foreign Address        State
PID/Program name
tcp    0    0      0.0.0.0:22           0.0.0.0:*           LISTEN
694/sshd  tcp    0    0      144.38.214.132:25 0.0.0.0:*           LISTEN
3800/exim4  tcp    0    0      127.0.0.1:25 0.0.0.0:*           LISTEN
3800/exim4  tcp    0    0      144.38.214.132:22 144.38.192.40:50033  ESTABLISHED
1698/sshd: cgl [pri
tcp6    0    0      :::22           :::*            LISTEN
694/sshd tcp6    0    0      ::1:25       :::*            LISTEN
3800/exim4 tcp6  0     0      ::1:25       :::*            LISTEN

```