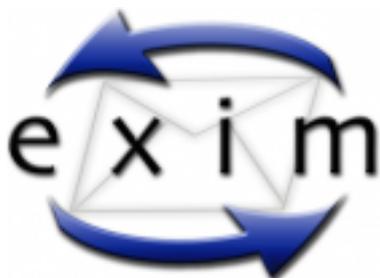# Exim - настройка вторичного mail exchanger

Опубликовано muff в Вс, 2015-07-19 00:00

Переносил вторичный **mail exchanger (MX)** на новый сервер. Решил выложить инфу и конфиги - еще пригодится...

Исходные данные:

- Hostname: **mx2.kyivlink.com**
- IP: **195.12.59.26**
- Domain: **kyivlink.com**

Проверяем, куда указывают записи **mail exchanger** домена **kyivlink.com** (сервер мультидоменный, но тестировать будем на этом домене):

```
# host -t mx kyivlink.com
kyivlink.com mail is handled by 10 mail.kyivlink.com.
kyivlink.com mail is handled by 20 mx2.kyivlink.com.
```

Важно! Необходимо, чтобы "прямая" и "обратная" запись в **DNS** совпадали. Тоесть в нашем случае, необходимо чтобы запись **mx2.kyivlink.com** "резолвилась" в IP-адрес **195.12.59.26**, а **PTR**-запись для IP **195.12.59.26** была установлена в **mx2.kyivlink.com**.

Проверим, выполняются ли эти условия:

```
# host mx2.kyivlink.com.
mx2.kyivlink.com has address 195.12.59.26

# host 195.12.59.26
26.59.12.195.in-addr.arpa domain name pointer mx2.kyivlink.com.
```

В **DNS**-записях все в порядке. Приступим непосредственно к настройке **Exim**.

Внесем в **/etc/make.conf** следующий блок:

```
PORTSDIR?= /usr/ports
# EXIM
.if ${.CURDIR} == ${PORTSDIR}/mail/exim
LOG_FILE_PATH?= syslog
WITH_DEFAULT_CHARSET?= koi8-r
.endif
```

Выполним установку **Exim** из системы портов:

```
# cd /usr/ports/mail/exim && make install clean && rehash
```

При сборке указываем необходимость сборки с поддержкой **MySQL**:

```
[x] MYSQL          Enable mysql lookups
[x] SPF            Enable Sender Policy Framework checking
```

По завершению установки выводится список рекомендуемых действий:

```
To use Exim instead of sendmail on startup:

*) Clear the sendmail queue and stop the sendmail daemon.
*) Adjust mailer.conf(5) as appropriate.
*) Set the 'sendmail_enable' rc.conf(5) variable to 'NONE'.
*) Set the 'daily_status_include_submit_mailq' and
   'daily_clean_hoststat_enable' periodic.conf(5)
   variables to 'NO'.
*) Consider setting 'daily_queuerun_enable' and
   'daily_submit_queuerun' to "NO" in periodic.conf(5),
   if you intend to manage queue runners / deliveries closely.
*) Set the 'exim_enable' rc.conf(5) variable to 'YES'.
*) Start exim with '/usr/local/etc/rc.d/exim start'.

You may also want to configure newsyslog(8) to rotate Exim log files:

/var/log/exim/mainlog   mailnull:mail 640 7 * @T00 ZN
/var/log/exim/rejectlog mailnull:mail 640 7 * @T00 ZN
```

Относительно настройки ротации логов (в конце рекомендаций) - можно пропустить этот пункт, поскольку в опциях сборки указывали, что логировние будет выполняться с помощью **syslog**, тоесть логирование будет выполняться в **maillog**, настройка ротации которого уже выполнена.

А вот остальные рекомендации стоит выполнить.

Останавливаем **sendmail** и отключаем его поддержку в **rc.conf**:

```
# sh /etc/rc.d/sendmail forcestop
# echo '# Disable Sendmail' >> /etc/rc.conf
# echo 'sendmail_enable="NONE"' >> /etc/rc.conf
```

Файл **/etc/mail/mailer.conf** приводим к следующему состоянию:

```
sendmail        /usr/local/sbin/eximsend-mail        /usr/local/sbin/eximmailq
    /usr/local/sbin/exim -bpnewaliases       /usr/local/sbin/exim -bihoststat
/usr/local/sbin/eximpurgestat        /usr/local/sbin/exim
```

Настраиваем **periodic.conf**:

```
# echo 'daily_status_include_submit_mailq="NO"' >> /etc/periodic.conf
# echo 'daily_clean_hoststat_enable="NO"' >> /etc/periodic.conf
# echo 'daily_queuerun_enable="NO"' >> /etc/periodic.conf
# echo 'daily_submit_queuerun="NO"' >> /etc/periodic.conf
```

Остается только добавить поддержку **Exim** в **rc.conf** и запустить **Exim**. Однако, предварительно необходимо его настроить.

Отталкиваемся от того, что MySQL **[1]** и **Clamav** [2] установлены, настроены и работают.

Отредактируем **/usr/local/etc/exim/configure** до следующего содержания:

```
##########################################################################
    Runtime configuration file for Exim        ############################
```

```
##################################################################################
##########################                 MAIN CONFIGURATION SETTINGS
          ##############################################################
GREYLIST_ENABLED_GREY       = yesGREYLIST_INITIAL_DELAY       = 15 MINUTEGREYLIS
T_INITIAL_LIFETIME     = 4 HOURGREYLIST_WHITE_LIFETIME      = 12 DAYGREYLIST_BOU
NCE_LIFETIME       = 7 DAYGREYLIST_RECORD_LIFETIME      = 30 DAYGREYLIST_TABLE
      = greylist.ifdef GREYLIST_ENABLED_GREY  GREYLIST_TEST = SELECT CASE \   WHE
N now() > block_expires THEN "accepted" \  ELSE "deferred" \  END AS result, id \  FRO
M GREYLIST_TABLE \  WHERE (now() < record_expires) \  AND (sender_type = ${if def:se
nder_address_domain{'NORMAL'}{'BOUNCE'} }) \  AND (sender = '${quote_mysql:${if d
ef:sender_address_domain{$sender_address_domain}{${domain:$h_from:}} }}') \  AND
 (recipient = '${quote_mysql:${if def:domain{$domain}{${domain:$h_to:}} }}') \  AND
(relay_ip = '${quote_mysql:${mask:$sender_host_address/32}}')' \  ORDER BY result DES
C LIMIT 1GREYLIST_ADD = REPLACE INTO GREYLIST_TABLE \  (relay_ip, sender_type, sen
der, recipient, block_expires, \  record_expires, create_time, type) \  VALUES ( '${quote_
mysql:${mask:$sender_host_address/32}}', \  ${if def:sender_address_domain{'NORMA
L'}{'BOUNCE'}}, \  '${quote_mysql:${if def:sender_address_domain{$sender_address_d
omain}{${domain:$h_from:}} }}', \  '${quote_mysql:${if def:domain{$domain}{${dom
ain:$h_to:}} }}', \  DATE_ADD(now(), INTERVAL GREYLIST_INITIAL_DELAY), \  DATE_ADD(
now(), INTERVAL GREYLIST_INITIAL_LIFETIME), \  now(), \  'AUTO' \  ) GREYLIST_DEFER
_HIT = UPDATE GREYLIST_TABLE \  SET blockcount=blockcount+1, last_block=now() \  W
HERE id = $acl_m9  GREYLIST_OK_COUNT = UPDATE GREYLIST_TABLE \  SET passcount=
passcount+1, last_pass=now() \  WHERE id = $acl_m9  GREYLIST_OK_NEWTIME = UPDAT
E GREYLIST_TABLE \  SET record_expires = DATE_ADD(now(), INTERVAL GREYLIST_WHITE
_LIFETIME) \  WHERE id = $acl_m9 AND type='AUTO'  GREYLIST_OK_BOUNCE = UPDATE G
REYLIST_TABLE \  SET record_expires = DATE_ADD(now(), INTERVAL GREYLIST_BOUNCE_L
IFETIME) \  WHERE id = $acl_m9 AND type='AUTO'  GREYLIST_CLEAN = DELETE FROM GR
EYLIST_TABLE \  WHERE (DATE_ADD(record_expires, INTERVAL GREYLIST_RECORD_LIFETI
ME) < now()) AND (type='AUTO').endifprimary_hostname = mx2.kyivlink.com
domainlist local_domains = ${lookup mysql{SELECT domain FROM domains \
   WHERE domain='${domain}' AND \                    (type='LOCAL' OR type='VIRTUAL')}
}domainlist relay_to_domains = ${lookup mysql{SELECT domain FROM domains \
       WHERE domain='${domain}' AND type='RELAY'}}hostlist spamers = ${lookup my
sql{SELECT senders FROM blacklist_host WHERE senders='${sender_host_address}'}}ho
stlist relay_from_hosts = localhostauth_advertise_hosts = *daemon_smtp_ports = 25log_s
elector = \     +all_parents \     +lost_incoming_connection \     +received_sender \
  +received_recipients \     +smtp_confirmation \     +smtp_syntax_error \     +smtp_
protocol_error \     -queue_runacl_smtp_rcpt = acl_check_rcptacl_smtp_data = acl_check_
dataav_scanner = clamd:/var/run/clamav/clamd.sockqualify_domain = mx2.kyivlink.com
local_interfaces = 195.12.59.26
allow_domain_literals = falseexim_user = mailnullexim_group = mailnever_users = rootho
st_lookup = *rfc1413_hosts = *rfc1413_query_timeout = 5ssyslog_duplication = falseigno
re_bounce_errors_after = 5dtimeout_frozen_after = 7dmessage_size_limit = 20Mrecipient
s_max = 50smtp_accept_max = 150smtp_accept_max_per_connection = 20smtp_accept_m
ax_per_host = 20smtp_connect_backlog = 50smtp_accept_queue_per_connection = 30spli
t_spool_directory = trueremote_max_parallel = 15smtp_banner = "MX2.KYIVLINK.COM
 ESMTP"hide mysql_servers = localhost/exim/exim/MYSQL_PASS_HERE
##################################################################################
###########                   ACL CONFIGURATION                ##        Specifies ac
cess control lists for incoming SMTP mail    ###############################
#####################################################
begin acl.ifdef GREYLIST_ENABLED_GREY greylist_acl:
# clean greylist records as 09:3xBRST 10:3xBRDT (horario normal)
  warn  condition = ${if eq {${substr{8}{4}{$tod_zulu} }} {0100}{yes}{no}}       set
acl_m4 = ${lookup mysql{GREYLIST_CLEAN}}
  # For regular deliveries, check greylist. # check greylist tuple, returning "accepted", "
deferred" or "unknown"  # in acl_m8, and the record id in acl_m9
  warn set acl_m8 = ${lookup mysql{GREYLIST_TEST}{$value}{result=unknown}}
# here acl_m8 = "result=x id=y"
```

```
    set acl_m9 = ${extract{id}{$acl_m8}{$value}{-1}}
# now acl_m9 contains the record id (or -1)
    set acl_m8 = ${extract{result}{$acl_m8}{$value}{unknown}}
# now acl_m8 contains unknown/deferred/accepted
# check if we know a certain triple, add and defer message if not  accept
# if above check returned unknown (no record yet)
    condition = ${if eq {$acl_m8} {unknown} {1}}     # then also add a record
    condition = ${lookup mysql{GREYLIST_ADD}{yes}{no}}
# check if the triple is still blocked  accept
# if above check returned deferred then defer
    condition = ${if eq{$acl_m8} {deferred} {1}}     # and note it down
    condition = ${lookup mysql{GREYLIST_DEFER_HIT}{yes}{yes}}
# use a warn verb to count records that were hit
  warn condition = ${lookup mysql{GREYLIST_OK_COUNT}}
# use a warn verb to set a new expire time on automatic records,  # but only if the mail
was not a bounce, otherwise set to now().
  warn !senders = : postmaster@* : Mailer-Daemon@*     condition = ${lookup mysql{G
REYLIST_OK_NEWTIME}}  warn senders = : postmaster@* : Mailer-Daemon@*     conditi
on = ${lookup mysql{GREYLIST_OK_BOUNCE}}  deny.endifacl_check_rcpt: accept  hosts
= +relay_from_hosts deny   domains      = +local_domains        local_parts  = ^[.] : ^.
*[@%!/|] deny   domains      = !+local_domains                local_parts  = ^[./|] : ^.*[
@%!] : ^.*/\\.\\./  accept  local_parts  = postmaster        domains      = +local_domains
deny   message      = HELO/EHLO required by SMTP RFC        condition    = ${if eq{$se
nder_helo_name}{}{yes}{no}}# orange.fr war :)
  deny   message      = all email from *.orange.fr - discarded!        condition    = ${if
match{$sender_helo_name}{.orange.fr}{yes}{no}}# .bezeqint.net
  deny   message      = all email from *.bezeqint.net - discarded!        condition    = $
{if match{$sender_helo_name}{.bezeqint.net}{yes}{no}}# .libero.it
  deny   message      = all email from *.libero.it - discarded!        condition    = ${if
match{$sender_helo_name}{.libero.it}{yes}{no}}# .ono.com
  deny   message      = all email from *.ono.com - discarded!        condition    = ${if
match{$sender_helo_name}{.ono.com}{yes}{no}}# isp.novis.pt
  deny   message      = all email from *.isp.novis.pt - discarded!        condition    = ${if match{
$sender_helo_name}{.isp.novis.pt}{yes}{no}}  deny   message= Yoy address in banlist!     send
ers=${lookup mysql{SELECT senders FROM blacklist WHERE senders='${quote_mysql:$sender_add
ress}' \      OR senders='*@${quote_mysql:$sender_address_domain}' LIMIT 1}} deny   hosts =
+spamers        message      = Host rejected by: spamers list on rbl.mx2.kyivlink.com
. deny   message     = Go Away! You are spammer.        condition    = ${if match{$sender_host
_name} \            {bezeqint\\.net|net\\.il|dialup|pool|peer|ppp|dhcp} \              {yes}
{no}} deny   message      = rejected because $sender_host_address \     is in a black list at $dn
slist_domain\n$dnslist_text        hosts       = !+relay_from_hosts        !authenticated = *       log
_message  = found in $dnslist_domain        dnslists    = bl.spamcop.net : \              cbl.ab
useat.org : \              dnsbl.njabl.org : \              sbl-xbl.spamhaus.org : \
  pbl.spamhaus.org  drop   message    = Rejected - Sender Verify Failed       log_message = Reje
cted - Sender Verify Failed                  !verify = sender/no_details/callout=2m,defer_ok
   !condition = ${if eq{$sender_verify_failure}{}}  .ifdef GREYLIST_ENABLED_GREY   defer host
s    = !+relay_from_hosts       !authenticated = *       !senders     = : postmaster@* : Mailer-D
aemon@*        acl        = greylist_acl        message      = GreyListed: please try again later  .en
dif accept domains   = +local_domains        endpass       message     = unknown user
verify    = recipient accept domains   = +relay_to_domains        endpass        message
= Unknown user      verify     = recipient/callout=2m,defer_ok,use_postmaster accept  hosts
  = +relay_from_hosts accept authenticated = * deny   message     = relay not permittedaccep
tacl_check_data: .ifdef GREYLIST_ENABLED_GREY   defer hosts      = !+relay_from_hosts      sen
ders      = : postmaster@* : Mailer-Daemon@*      acl        = greylist_acl        message      =
GreyListed: please try again later  .endifdeny   message = This message contains a virus ($malwa
re_name).       demime = *       malware = */defer_okaccept
#####################################################################
##########            ROUTERS CONFIGURATION            ##         Specifies ho
w addresses are handled    #####################################
```

```
###############################      THE ORDER IN WHICH THE ROUTERS AR
E DEFINED IS IMPORTANT!      ## An address is passed to each router in turn until it is accepted.  #
############################################################
##########
begin routersdnslookup:  driver = dnslookup  domains = ! +local_domains  transport = remote_smt
p  ignore_target_hosts = 0.0.0.0 : 127.0.0.1/8  no_moresystem_aliases:  driver = redirect  allow_fail
allow_defer  data = ${lookup mysql{SELECT recipients FROM aliases \      WHERE (local_part='${l
ocal_part}' AND domain='${domain}') \      OR (local_part='*' AND domain='$domain')ORDER BY l
ocal_part='*' LIMIT 1}}virtual_localuser:  driver = accept  domains = ${lookup mysql{SELECT doma
in from domains WHERE domain='${domain}'}}  local_parts = ${lookup mysql{SELECT login from
users \        WHERE login='${local_part}' AND domain='${domain}'}}  transport = local_deliver
y  cannot_route_message = Unknown user
############################################################
##########               TRANSPORTS CONFIGURATION          #############
############################################################
         ORDER DOES NOT MATTER             ##     Only one appropriate transport is called f
or each delivery.   ############################################################
####################begin transportsremote_smtp:  driver = smtp  interface =
195.12.59.26
local_delivery:  driver = appendfile  check_string = ""  create_directory  delivery_date_add  directory
 = ${lookup mysql{SELECT LOWER(CONCAT('/var/exim/$domain/',login)) FROM users \        WH
ERE login='${local_part}' AND domain='${domain}';}}  directory_mode = 770  envelope_to_add  g
roup = mail  maildir_format  maildir_tag = ,S=$message_size  message_prefix = ""  message_suffix
= ""  mode = 0660  quota = ${lookup mysql{SELECT quota FROM users \      WHERE login='${loc
al_part}' AND domain='${domain}'}{${value}M}}  quota_size_regex = S=(\d+)$  quota_warn_thre
shold = 75%  return_path_addaddress_pipe:  driver = pipe  return_outputaddress_file:  driver = ap
pendfile  delivery_date_add  envelope_to_add  return_path_addaddress_reply:  driver = autoreply
############################################################
##########               RETRY CONFIGURATION              #############
############################################################
begin retry*            quota*            *        F,2h,15m; G,16h,1h,1.5; F,4d,6h
############################################################
##########               REWRITE CONFIGURATION             #############
############################################################
begin rewrite
############################################################
##########            AUTHENTICATION CONFIGURATION          #############
############################################################
begin authenticators# End of Exim configuration file
```

Создадим базу данных **MySQL** и пользователя с правами на эту БД:

```
mysql> create database exim;
Query OK, 1 row affected (0,00 sec)

mysql> grant all on exim.* to 'exim'@'localhost' identified by 'MYSQL_PASS_HERE';
Query OK, 0 rows affected (0,00 sec)
```

Скачиваем дамп и заливаем его в БД:

```
# fetch http://muff.kiev.ua/files/exim_mx2.sql
# mysql -u exim -pMYSQL_PASS_HERE exim < exim_mx2.sql
```

Внимание! В моем случае, дамп БД готов для использования. Если же использовать на других серверах, необходимо изменить данные (можно и структуру, например, дефолтные значения) в таблицах **aliases** и **domains**.

Запускаем **exim**:

```
# sh /usr/local/etc/rc.d/exim start
```

Проверяем, запустился ли демон:

```
# ps -ax | grep exim
70442  -  Is       0:00,00 /usr/local/sbin/exim -bd -q30m
```

Демон запустился. Настройка **Exim** в роли вторичного **mail exchanger (MX)** завершена.

Источник (получено *2026-06-02 18:50*):
http://muff.kiev.ua/content/exim-nastroika-vtorichnogo-mail-exchanger

Ссылки:
[1] http://muff.kiev.ua/content/mysql-ustanovka-i-bazovaya-nastroika
[2] http://muff.kiev.ua/content/clamav-antivirusnaya-zashchita-servera