



## Exim - настройка вторичного mail exchanger

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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. То есть 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 логирование будет выполняться с помощью **syslog**, то есть 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 MINUTE
GREYLIST_INITIAL_LIFETIME = 4 HOURGREYLIST_WHITE_LIFETIME = 12 DAY
GREYLIST_BOUNCE_LIFETIME = 7 DAYGREYLIST_RECORD_LIFETIME = 30 DAY
GREYLIST_TABLE = greylist.ifdef GREYLIST_ENABLED_GREY
GREYLIST_TEST = SELECT CASE \ WHEN now() > block_expires THEN "accepted" \ ELSE "deferred" \ END AS result, id \ FROM GREYLIST_TABLE \ WHERE (now() < record_expires) \ AND (sender_type = ${if def:sender_address_domain{'NORMAL'}{'BOUNCE'}}) \ AND (sender = '${quote_mysql:${if def:sender_address_domain{$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 DESC LIMIT 1
GREYLIST_ADD = REPLACE INTO GREYLIST_TABLE \ (relay_ip, sender_type, sender, recipient, block_expires, \ record_expires, create_time, type) \ VALUES ('${quote_mysql:${mask:$sender_host_address/32}}', \ ${if def:sender_address_domain{'NORMAL'}{'BOUNCE'}}, \ '${quote_mysql:${if def:sender_address_domain{$sender_address_domain}{$domain:$h_from:}}}', \ '${quote_mysql:${if def:domain{$domain}{$domain:$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() \ WHERE id = $acl_m9
GREYLIST_OK_COUNT = UPDATE GREYLIST_TABLE \ SET passcount=passcount+1, last_pass=now() \ WHERE id = $acl_m9
GREYLIST_OK_NEWTIME = UPDATE GREYLIST_TABLE \ SET record_expires = DATE_ADD(now(), INTERVAL GREYLIST_WHITE_LIFETIME) \ WHERE id = $acl_m9 AND type='AUTO'
GREYLIST_OK_BOUNCE = UPDATE GREYLIST_TABLE \ SET record_expires = DATE_ADD(now(), INTERVAL GREYLIST_BOUNCE_LIFETIME) \ WHERE id = $acl_m9 AND type='AUTO'
GREYLIST_CLEAN = DELETE FROM GREYLIST_TABLE \ WHERE (DATE_ADD(record_expires, INTERVAL GREYLIST_RECORD_LIFETIME) < now()) AND (type='AUTO').endif
primary_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 spammers = ${lookup mysql{SELECT senders FROM blacklist_host WHERE senders='${sender_host_address}'}}
hostlist relay_from_hosts = localhost
auth_advertise_hosts = *daemon
smtp_ports = 25
log_selector = \ +all_parents \ +lost_incoming_connection \ +received_sender \ +received_recipients \ +smtp_confirmation \ +smtp_syntax_error \ +smtp_protocol_error \ -queue_runacl
smtp_rcpt = acl_check_rcpt
acl_smtp_data = acl_check_data
av_scanner = clamd:/var/run/clamav/clamd.sock
qualify_domain = mx2.kyivlink.com
local_interfaces = 195.12.59.26
allow_domain_literals = false
exim_user = mailnull
exim_group = mailnever
users = root
host_lookup = *rfc1413
hosts = *rfc1413
query_timeout = 5s
syslog_duplication = false
ignore_bounce_errors_after = 5d
timeout_frozen_after = 7d
message_size_limit = 20M
recipient_s_max = 50
smtp_accept_max = 150
smtp_accept_max_per_connection = 20
smtp_accept_max_per_host = 20
smtp_connect_backlog = 50
smtp_accept_queue_per_connection = 30
split_spool_directory = true
remote_max_parallel = 15
smtp_banner = "MX2.KYIVLINK.COM
ESMTP"
hide_mysql_servers = localhost/exim/exim/MYSQL_PASS_HERE
#####
##### ACL CONFIGURATION #####
##### Specifies access 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{GREYLIST_OK_NEWTIME}}
warn senders = : postmaster@* : Mailer-Daemon@* condition = ${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{
${sender_helo_name}{.isp.novis.pt}{yes}{no}} deny message= Yoy address in banlist!
senders=${lookup mysql{SELECT senders FROM blacklist WHERE senders='${quote_mysql:${sender_add
ress}}' \ OR senders='*${quote_mysql:${sender_address_domain}}' LIMIT 1}} deny hosts =
+spammers message = Host rejected by: spammers 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 ARE 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_smtp ignore_target_hosts = 0.0.0.0 : 127.0.0.0/8 no_moresystem_aliases: driver = redirect allow_fail allow_defer data = ${lookup mysql{SELECT recipients FROM aliases \ WHERE (local_part='${local_part}' AND domain='${domain}') \ OR (local_part='*' AND domain='${domain}')ORDER BY local_part='*' LIMIT 1}}virtual_localuser: driver = accept domains = ${lookup mysql{SELECT domain from domains WHERE domain='${domain}'}} local_parts = ${lookup mysql{SELECT login from users \ WHERE login='${local_part}' AND domain='${domain}'}} transport = local_delivery cannot_route_message = Unknown user
#####
##### TRANSPORTS CONFIGURATION #####
##### ORDER DOES NOT MATTER ## Only one appropriate transport is called for 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 \ WHERE login='${local_part}' AND domain='${domain}';}} directory_mode = 770 envelope_to_add group = mail maildir_format maildir_tag = ,S=$message_size message_prefix = "" message_suffix = "" mode = 0660 quota = ${lookup mysql{SELECT quota FROM users \ WHERE login='${local_part}' AND domain='${domain}'}}{${value}M}} quota_size_regex = S=(\d+)$ quota_warn_threshold = 75% return_path_addaddress_pipe: driver = pipe return_outputaddress_file: driver = appendfile 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**:



## Exim - настройка вторичного mail exchanger

Опубликовано muff.kiev.ua (<http://muff.kiev.ua>)

---

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

Проверяем, запустился ли демон:

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

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

**Источник (получено 2026-05-07 10:59):**

<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>