Postfix & dovecot & mysql

1. DNS

|  |
| --- |
| atreia.org MX 10 atreia.org  atreia.org MX 10 12.34.56.78  mail.atreia.org MX 10 12.34.56.78 |

2. SSL

|  |
| --- |
| CA인증서, 서버인증서, 서버인증서키를 준비합니다. |

3. Pakages

|  |
| --- |
| #apt-get install postfix postfix-mysql dovecot-core dovecot-imapd dovecot-pop3d dovecot-lmtpd dovecot-mysql mysql-server |

4. Mysql

|  |  |  |  |
| --- | --- | --- | --- |
| ### DB, 유저, TABLE은 상황에 맞게 수정 ###  1. DB를 생성합니다.  #mysqladmin -p create mailserver  2. 인증에 관련된 쿼리를 날릴 계정을 생성합니다.  mysql> GRANT SELECT ON mailserver.\* TO 'mailuser'@'127.0.0.1' IDENTIFIED BY 'mailuserpass';  mysql> FLUSH PRIVILEGES;  3. 테이블 생성 (도메인, 유저, ALIASES)   |  | | --- | | CREATE TABLE `virtual\_domains` (  `id` int(11) NOT NULL auto\_increment,  `name` varchar(50) NOT NULL,  PRIMARY KEY (`id`)  ) ENGINE=InnoDB DEFAULT CHARSET=utf8;  CREATE TABLE `virtual\_users` (  `id` int(11) NOT NULL auto\_increment,  `domain\_id` int(11) NOT NULL,  `password` varchar(106) NOT NULL,  `email` varchar(100) NOT NULL,  PRIMARY KEY (`id`),  UNIQUE KEY `email` (`email`),  FOREIGN KEY (domain\_id) REFERENCES virtual\_domains(id) ON DELETE CASCADE  ) ENGINE=InnoDB DEFAULT CHARSET=utf8;  CREATE TABLE `virtual\_aliases` (  `id` int(11) NOT NULL auto\_increment,  `domain\_id` int(11) NOT NULL,  `source` varchar(100) NOT NULL,  `destination` varchar(100) NOT NULL,  PRIMARY KEY (`id`),  FOREIGN KEY (domain\_id) REFERENCES virtual\_domains(id) ON DELETE CASCADE  ) ENGINE=InnoDB DEFAULT CHARSET=utf8; |   4. 테스트용 데이터를 삽입합니다.   |  | | --- | | INSERT INTO `mailserver`.`virtual\_domains` (`id` ,`name`) VALUES ('1', 'atreia.org'),  INSERT INTO `mailserver`.`virtual\_users` (`id`, `domain\_id`, `password` , `email`) VALUES ('1', '1', ENCRYPT('skills2016##', CONCAT('$6$', SUBSTRING(SHA(RAND()), -16))), 'user01@atreia.org'),  ('2', '1', ENCRYPT('skills2016##', CONCAT('$6$', SUBSTRING(SHA(RAND()), -16))), 'user02@atreia.org');  INSERT INTO `mailserver`.`virtual\_aliases` (`id`, `domain\_id`, `source`, `destination`)  VALUES ('1', '1', 'alias@atreia.org', 'user01@atreia.org'); |   5. 테이블 내용을 확인합니다.   |  | | --- | | mysql> SELECT \* FROM mailserver.테이블이름; | |

5. Postfix

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1. /etc/postfix/main.cf  ### private/dovecot-lmtp 파일은 dovecot 설정 후 생성됩니다 ###   |  | | --- | | # Debian specific: Specifying a file name will cause the first  # line of that file to be used as the name. The Debian default  # is /etc/mailname.  smtpd\_banner = $myhostname ESMTP $mail\_name (Ubuntu)  biff = no    # appending .domain is the MUA's job.  append\_dot\_mydomain = no    # Uncomment the next line to generate "delayed mail" warnings  #delay\_warning\_time = 4h  readme\_directory = no  # TLS parameters  #smtpd\_tls\_cert\_file=/etc/ssl/certs/ssl-cert-snakeoil.pem  #smtpd\_tls\_key\_file=/etc/ssl/private/ssl-cert-snakeoil.key  #smtpd\_use\_tls=yes  #smtpd\_tls\_session\_cache\_database = btree:${data\_directory}/smtpd\_scache  #smtp\_tls\_session\_cache\_database = btree:${data\_directory}/smtp\_scache    smtpd\_tls\_cert\_file=/var/mail/certs/mail.atreia.org.crt  smtpd\_tls\_key\_file=/var/mail/certs/mail.atreia.org.key  smtpd\_tls\_CAfile=/etc/ssl/certs/ATREIA-CA.crt  smtpd\_use\_tls=yes  smtpd\_tls\_auth\_only=yes  #Enabling SMTP for authenticated users, and handing off authentication to Dovecot  smtpd\_sasl\_type = dovecot  smtpd\_sasl\_path = private/auth  smtpd\_sasl\_auth\_enable = yes  smtpd\_recipient\_restrictions = permit\_sasl\_authenticated, permit\_mynetworks, reject\_unauth\_destination  # See /usr/share/doc/postfix/TLS\_README.gz in the postfix-doc package for  # information on enabling SSL in the smtp client  myhostname = mail.atreia.org  alias\_maps = hash:/etc/aliases  alias\_database = hash:/etc/aliases  myorigin = /etc/mailname  #mydestination = example.com, hostname.example.com, localhost.example.com, localhost  mydestination = localhost, localhost.localdomain  relayhost =  mynetworks =  mailbox\_size\_limit = 0  recipient\_delimiter = +  inet\_interfaces = all  #Handing off local delivery to Dovecot's LMTP, and telling it where to store mail  virtual\_transport = lmtp:unix:private/dovecot-lmtp  #Virtual domains, users, and aliases  virtual\_mailbox\_domains = mysql:/etc/postfix/mysql-virtual-mailbox-domains.cf  virtual\_mailbox\_maps = mysql:/etc/postfix/mysql-virtual-mailbox-maps.cf  virtual\_alias\_maps = mysql:/etc/postfix/mysql-virtual-alias-maps.cf, mysql:/etc/postfix/mysql-virtual-email2email.cf |   2. /etc/postfix/mysql-virtual-mailbox-domains.cf (생성)   |  | | --- | | user = mailuser  password = mailuserpass  hosts = 127.0.0.1  dbname = mailserver  query = SELECT 1 FROM virtual\_domains WHERE name='%s' |   3. /etc/postfix/mysql-virtual-mailbox-maps.cf (생성)   |  | | --- | | user = mailuser  password = mailuserpass  hosts = 127.0.0.1  dbname = mailserver  query = SELECT 1 FROM virtual\_users WHERE email='%s' |   4. /etc/postfix/mysql-virtual-alias-maps.cf (생성)   |  | | --- | | user = mailuser  password = mailuserpass  hosts = 127.0.0.1  dbname = mailserver  query = SELECT destination FROM virtual\_aliases WHERE source='%s' |   5. /etc/postfix/mysql-virtual-email2email.cf (생성)   |  | | --- | | user = mailuser  password = mailuserpass  hosts = 127.0.0.1  dbname = mailserver  query = SELECT email FROM virtual\_users WHERE email='%s' |   6. 설정 테스트   |  | | --- | | # systemctl restart postfix.service  # postmap -q atreia.org mysql:/etc/postfix/mysql-virtual-mailbox-domains.cf  1  # postmap -q user01@atreia.org mysql:/etc/postfix/mysql-virtual-mailbox-maps.cf  1  # postmap -q alias@atreia.org mysql:/etc/postfix/mysql-virtual-mailbox-domains.cf  user01@atreia.org |   ### master.cf 파일은 변경하지 않고 일반, TLS 포트를 모두 25번포트로 사용합니다 ### |

6. Dovecot

|  |  |
| --- | --- |
| 1. /etc/dovecot/dovecot.conf (pop3 사용시 protocols = imap pop3 lmtp)    2. /etc/dovecot/conf.d/10-mail.conf  ### 메일이 저장되는 디렉터리는 “/var/mail/vhosts/atreia.org/유저이름” 입니다 ###      # mkdir -p /var/mail/vhosts/atreia.org  # groupadd -g 5000 vmail  # useradd -g vmail -u 5000 vmail -d /var/mail  # chown -R vmail:vmail /var/mail && chown -R vmail:dovecot /etc/dovecot  3. /etc/dovecot/conf.d/10-auth.conf      C:\Users\ATREIA\AppData\Local\Microsoft\Windows\INetCacheContent.Word\제목 없음.png  4. /etc/dovecot/conf.d/auth-sql.conf.ext    5. /etc/dovecot/dovecot-sql.conf.ext        6. /etc/dovecot/conf.d/10-master.conf (lmtp, SASL 설정)      7. /etc/dovecot/conf.d/10-ssl.conf    8. /etc/dovecot/conf.d/10-master.conf (일반 포트를 사용하지 않을 때)   |  | | --- | | service imap-login {  inet\_listener imap {  port = 0  }  inet\_listener imaps {  port = 993  ssl = yes  }  service pop3-login {  inet\_listener pop3 {  port = 0  }  inet\_listener pop3s {  port = 995  ssl = yes  } | |

7. 테스트

|  |
| --- |
| 아래와 같이 메일 클라이언트에서 설정하고 테스트 합니다.  서버 : mail.atreia.org  받는 메일 : imap / SSL / 993  보내는 메일 : TLS / 25 |