TUGAS 9

1. Setelah kita tau tentang paket apa yang mau di install pada server disini untuk kebutuhan kita akan menginstall pada server postgersql & nginx. Langkah untuk melihat package sudah ada di server kita. *Rpm -qa | grep* nama paket dan cek versi.

```
[root@instance-1 public_html]# rpm -qa | grep postgres
postgresql-contrib-9.2.24-4.el7_8.x86_64
postgresql-libs-9.2.24-4.el7_8.x86_64
postgresql-server-9.2.24-4.el7_8.x86_64
postgresql-9.2.24-4.el7_8.x86_64
[root@instance-1 public_html]# postgres -V
postgres (PostgreSQL) 9.2.24
[root@instance-1 public_html]# nginx -v
nginx version: nginx/1.16.1
```

2. Setelah itu setup init db dengan cara

```
[root@instance-1 public_html]# postgresql-setup initdb
Initializing database ... OK
```

3. Cek status dan enable kan service lihat status running di port 5432

```
[root@instance-1 public_html]# systemctl start postgresql
[root@instance-1 public_html]# systemctl status postgresql
● postgresql.service - PostgreSQL database server
   Loaded: loaded (/usr/lib/systemd/system/postgresql.service; disabled; vendor preset: disabled)
   Active: active (running) since Jum 2020-06-26 06:26:44 UTC; 7s ago
  Process: 1373 ExecStart=/usr/bin/pg_ctl start -D ${PGDATA} -s -o -p ${PGPORT} -w -t 300 (code=exited, status=0/SUCCESS)
  Process: 1368 ExecStartPre=/usr/bin/postgresql-check-db-dir ${PGDATA} (code=exited, status=0/SUCCESS)
 Main PID: 1376 (postgres)
   CGroup: /system.slice/postgresql.service
           ├─1376 /usr/bin/postgres -D /var/lib/pgsql/data -p 5432
           ├─1377 postgres: logger process
           ├─1379 postgres: checkpointer process
           ├─1380 postgres: writer process
           ├─1381 postgres: wal writer process
           ├─1382 postgres: autovacuum launcher process
           └─1383 postgres: stats collector process

Jun 26 06:26:43 instance-1 systemd[1]: Starting PostgreSQL database server...
Jun 26 06:26:44 instance-1 systemd[1]: Started PostgreSQL database server.
```

4. Membuat kata sandi user postgres

```
[muhammad_aulia_rahman68@instance-1 public_html]$ sudo passwd postgres
Mengubah kata sandi pengguna postgres.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
passwd: semua token otentikasi berhasil diperbarui.
```

5. Check apakah Masuk ke user postgres

```
[muhammad_aulia_rahman68@instance-1 public_html]$ su - postgres
Sandi:
Last login: Jum Jun 26 07:32:52 UTC 2020 on pts/0
-bash-4.2$ whoami
postgres
```

6. Contoh di atas postgresql sudah servicenya jalan , sekarang ada beberapa cara untuk create role , add db , serta konfigurasi agar dapat di akses ole hip whitelist .

7. Melihat user siapa saja yang sudah ada table dan role database di postgresql.

```
postgres=# \dt
No relations found.
postgres=# debug1: client_input_channel_req: channel 0 rtype keepalive@openssh.com reply 1

postgres=# \l
                                  List of databases
   Name    |  Owner   | Encoding | Collate |    Ctype    |   Access privileges
-----------+----------+----------+---------+-------------+-----------------------
 postgres  | postgres | UTF8     | C       | id_ID.UTF-8 |
 template0 | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
           |          |          |         |             | postgres=CTc/postgres
 template1 | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
           |          |          |         |             | postgres=CTc/postgres
(3 rows)

postgres=# \dl
      Large objects
 ID | Owner | Description
----+-------+-------------
(0 rows)

postgres=# \t
Showing only tuples.
postgres=# \du
 postgres  | Superuser, Create role, Create DB, Replication | {}
```

8. Kita disini buat contoh user atasnama dengan role sama dengan psotgres dan database atasnama.
CREATE USER atasnama WITH PASSWORD '123456Ad' SUPERUSER REPLICATION CREATEROLE CREATEDB;
CREATE DATABASE atasnama_db;
GRANT ALL PRIVILEGES ON database atasnama_db to atasnama;

```
postgres=# CREATE USER atasnama WITH PASSWORD '123456Ad' SUPERUSER REPLICATION CREATEROLE CREATEDB;
CREATE ROLE
postgres=# \DU
Invalid command \DU. Try \? for help.
postgres=# \du
                            List of roles
 Role name |                   Attributes                   | Member of
-----------+------------------------------------------------+-----------
 atasnama  | Superuser, Create role, Create DB, Replication | {}
 postgres  | Superuser, Create role, Create DB, Replication | {}

postgres=# CREATE DATABASE atasnama_db;
CREATE DATABASE
postgres=# \dt
No relations found.
postgres=# \du
                            List of roles
 Role name |                   Attributes                   | Member of
-----------+------------------------------------------------+-----------
 atasnama  | Superuser, Create role, Create DB, Replication | {}
 postgres  | Superuser, Create role, Create DB, Replication | {}

postgres=# \l
                                  List of databases
    Name     |  Owner   | Encoding | Collate |    Ctype    |   Access privileges
-------------+----------+----------+---------+-------------+-----------------------
 atasnama_db | postgres | UTF8     | C       | id_ID.UTF-8 |
 postgres    | postgres | UTF8     | C       | id_ID.UTF-8 |
 template0   | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
             |          |          |         |             | postgres=CTc/postgres
 template1   | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
             |          |          |         |             | postgres=CTc/postgres
(4 rows)
```

```
postgres=# \l
                                  List of databases
    Name     |  Owner   | Encoding | Collate |    Ctype    |   Access privileges
-------------+----------+----------+---------+-------------+-----------------------
 atasnama_db | postgres | UTF8     | C       | id_ID.UTF-8 | =Tc/postgres         +
             |          |          |         |             | postgres=CTc/postgres+
             |          |          |         |             | atasnama=CTc/postgres
 postgres    | postgres | UTF8     | C       | id_ID.UTF-8 |
 template0   | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
             |          |          |         |             | postgres=CTc/postgres
 template1   | postgres | UTF8     | C       | id_ID.UTF-8 | =c/postgres          +
             |          |          |         |             | postgres=CTc/postgres
(4 rows)
```

9. Cek Masuk ke user yang sudah di buat dari local psql -d atasnama_db -U atasnama , dan akan muncul error peer autentifkasi di karenakan jenis hash pada postgresql di konfigurasi pg_hba.conf

```
-bash-4.2$ psql -d atanama_db -U atasnama
psql: FATAL:  Peer authentication failed for user "atasnama"
-bash-4.2$
```

10. Ganti hash peer pada pg_hba.conf dengan md5

pico /var/lib/pgsql/data/pg_hba.conf

peer auth = di atur oleh kernel di os tersebut

md 5 = oleh password yang telah di buat

trust = semua dapat mendapatakan authorized

```
# "local" is for Unix domain socket connections only
local   all             all                                     md5
# IPv4 local connections:
host    all             all             127.0.0.1/32            ident
# IPv6 local connections:
host    all             all             ::1/128                 ident
```

11. Coba masuk dengan user default postgresql setelah itu masuk dengan user atasnama dan coba dengan database atasnama_db.

```
-bash-4.2$ psql -d atasnama_db -U atasnama
Password for user atasnama:
psql (9.2.24)
Type "help" for help.

atasnama_db=#
```

12. Enable untuk akses database dari luar di postgresql.conf dengan edit line listen dan port saat ini port tidak di buka #.

```
# - Connection Settings -

listen_addresses = '*'                  # what IP address(es) to listen on;
                                        # comma-separated list of addresses;
                                        # defaults to 'localhost'; use '*' for all
                                        # (change requires restart)
#port = 5432                            # (change requires restart)
# Note: In RHEL/Fedora installations, you can't set the port number here;
# adjust it in the service file instead.
```

13. Agar user dapat mengakses semua atau whitelist ip tambahkan ip dan database usernya di pg_hba.conf.

```
# - Connection Settings -

listen_addresses = '*'                  # what IP address(es) to listen on;
                                        # comma-separated list of addresses;
                                        # defaults to 'localhost'; use '*' for all
                                        # (change requires restart)
#port = 5432                            # (change requires restart)
# Note: In RHEL/Fedora installations, you can't set the port number here;
# adjust it in the service file instead.
```

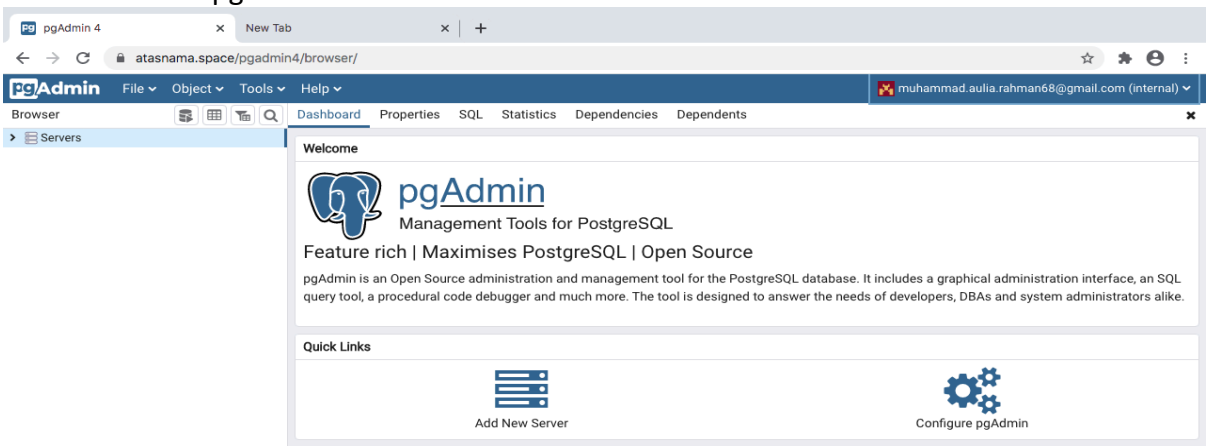
14. Setting Sesuai kebutuhan akses database ip , dan cara akses databases

```
# TYPE  DATABASE        USER            ADDRESS                 METHOD

# "local" is for Unix domain socket connections only
local   all             all                                     md5
# IPv4 local connections:
host    all             all             0.0.0.0/0               md5
# IPv6 local connections:
host    all             all             ::0/0                   md5
```

15. Coba akses dari remote

```
Password for user atasnama:
psql (12.3, server 9.2.24)
Type "help" for help.

atasnama_db=#
```

16. Coba akses dati pg admin



17. Cek nginx sudah terinstall di paket server

```
[root@instance-1 muhammad_aulia_rahman68]# rpm -qa | grep nginx
nginx-mod-mail-1.16.1-1.el7.x86_64
nginx-1.16.1-1.el7.x86_64
nginx-all-modules-1.16.1-1.el7.noarch
nginx-filesystem-1.16.1-1.el7.noarch
nginx-mod-http-perl-1.16.1-1.el7.x86_64
nginx-mod-http-xslt-filter-1.16.1-1.el7.x86_64
nginx-mod-http-image-filter-1.16.1-1.el7.x86_64
nginx-mod-stream-1.16.1-1.el7.x86_64
```

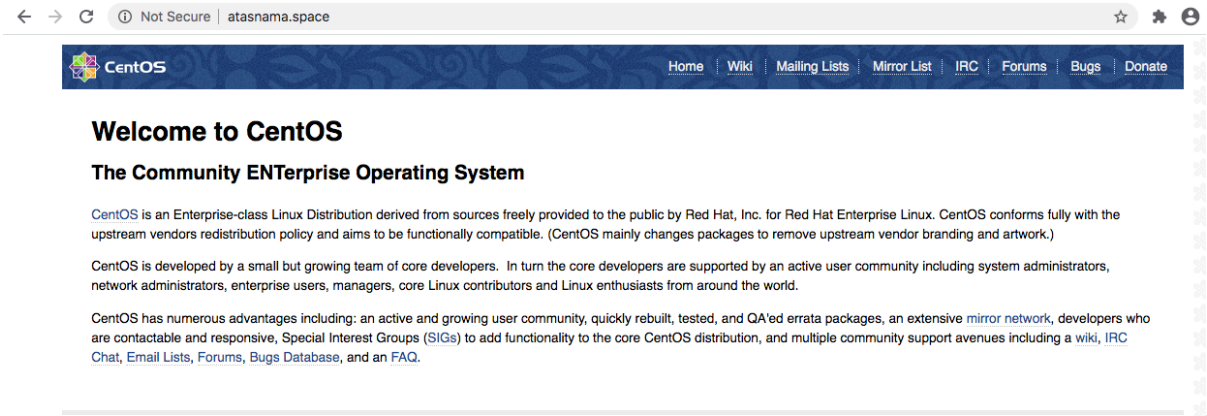
18. Disini akan konfigurasi nginx dengan forward ke belakang apache rubah port 8080 sesuai dengan soal di httpd.conf

```
#
#Listen 12.34.56.78:80
Listen 8080

#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a DSO you
# have to place corresponding `LoadModule' lines at this location so the
# directives contained in it are actually available _before_ they are used.
# Statically compiled modules (those listed by `httpd -l') do not need
# to be loaded here.
#
# Example:
# LoadModule foo_module modules/mod_foo.so
#
Include conf.modules.d/*.conf
```

19. Ganti virtual host apache ke port 8080 tetapi nginx tetap running di 80

```
<VirtualHost *:8080>
    ServerName www.atasnama.space
    ServerAlias atasnama.space
    DocumentRoot /var/www/html/public_html
    #AllowOverride All
    ErrorLog /var/www/html/log/error-atasnama.log
    CustomLog /var/www/html/log/requests.log combined
    RewriteEngine on
    RewriteCond %{SERVER_NAME} =atasnama.space [OR]
    RewriteCond %{SERVER_NAME} =www.atasnama.space
    RewriteRule ^ https://%{SERVER_NAME}%{REQUEST_URI} [END,NE,R=permanent]
</VirtualHost>
```

20. Setting nginx agar tetap load port 80 dan seperti ini


Not Secure | atasnama.space
CentOS
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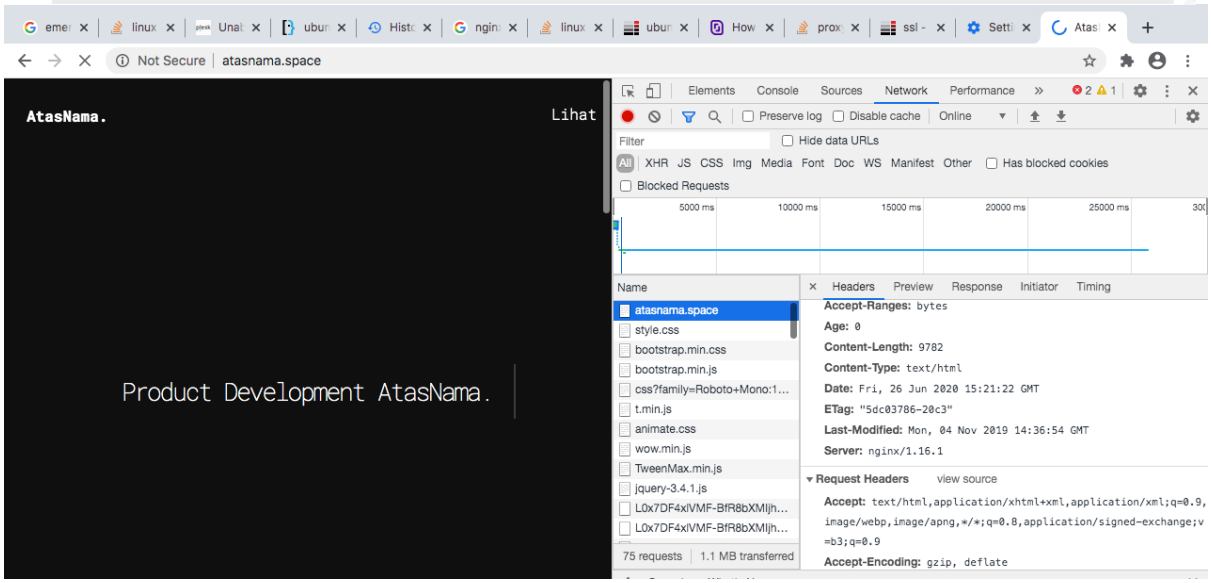
Welcome to CentOS
The Community ENTerprise Operating System
CentOS is an Enterprise-class Linux Distribution derived from sources freely provided to the public by Red Hat, Inc. for Red Hat Enterprise Linux. CentOS conforms fully with the upstream vendors redistribution policy and aims to be functionally compatible. (CentOS mainly changes packages to remove upstream vendor branding and artwork.)
CentOS is developed by a small but growing team of core developers. In turn the core developers are supported by an active user community including system administrators, network administrators, enterprise users, managers, core Linux contributors and Linux enthusiasts from around the world.
CentOS has numerous advantages including: an active and growing user community, quickly rebuilt, tested, and QA'ed errata packages, an extensive mirror network, developers who are contactable and responsive, Special Interest Groups (SIGs) to add functionality to the core CentOS distribution, and multiple community support avenues including a wiki, IRC Chat, Email Lists, Forums, Bugs Database, and an FAQ.


Not Secure | atasnama.space
AtasNama.
Lihat
Product Development AtasNama.
Elements
Console
Sources
Network
Performance
Preserve log
Disable cache
Online
Filter
Hide data URLs
XHR JS CSS Img Media Font Doc WS Manifest Other
Has blocked cookies
Blocked Requests
5000 ms
10000 ms
15000 ms
20000 ms
25000 ms
Name
atasnama.space
style.css
bootstrap.min.css
bootstrap.min.js
css?family=Roboto+Mono:1...
t.min.js
animate.css
wow.min.js
TweenMax.min.js
jquery-3.4.1.js
L0x7DF4xlVMF-BfR8bXMIjh...
L0x7DF4xlVMF-BfR8bXMIjh...
75 requests
1.1 MB transferred
Headers
Preview
Response
Initiator
Timing
Accept-Ranges: bytes
Age: 0
Content-Length: 9782
Content-Type: text/html
Date: Fri, 26 Jun 2020 15:21:22 GMT
ETag: "5dc03786-20c3"
Last-Modified: Mon, 04 Nov 2019 14:36:54 GMT
Server: nginx/1.16.1
Request Headers
view source
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,
image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v
=b3;q=0.9
Accept-Encoding: gzip, deflate