OS: Ubuntu 16.04

1. **Redis 的安装**

sudo -i

add-apt-repository ppa:chris-lea/redis-server

apt-get update

apt-get install redis-server

redis-benchmark -q -n 1000 -c 10 -P 5

nano /etc/redis/redis.conf

bind 0.0.0.0

nano /etc/redis/redis.conf

requirepass 123qwe

https://www.digitalocean.com/community/tutorials/how-to-configure-a-redis-cluster-on-ubuntu-14-04

https://www.digitalocean.com/community/tutorials/how-to-install-and-configure-redis-on-ubuntu-16-04

/etc/init.d/redis-server restart

1. redis-cli

2. auth yourpassword

redis-cli -h 52.8.213.154 -a 123qwe ping

1. **rsyslog的配置**

At Ubuntu 16.04 server side:

Add the follow lines to /etc/rsyslog.d/50-default.conf

(Note: In CentOS, this file is at /etc/rsyslog.conf)

$template MTX\_FORMAT,"%msg%\n"

# output logs for "auth,authpriv.\*" to remote

\*.\* @@54.244.204.121:514;MTX\_FORMAT

In Ubuntu’s /etc/rsyslog.conf

# Filter duplicated messages

$RepeatedMsgReduction off

Then run

sudo systemctl restart rsyslog (service rsyslog restart in Ubuntu 14.04)

If Unit rsyslog.service is masked

Quick fix:

systemctl unmask rsyslog.service

At Ubuntu 14.04 client side:

Add the following to security group

Custom TCP Rule TCP 514 54.202.161.108/32

Add the follow lines to /etc/rsyslog.conf

# specify senders you permit to access

$AllowedSender TCP, 127.0.0.1, 54.202.161.108/24

Make sure at the syslog client side, the service rsyslog is stopped

sudo service rsyslog stop

tail -f /var/log/syslog

Make sure only java is listening to TCP port 131

root@ip-172-31-11-91:~# ss -lptn 'sport = :514'

State Recv-Q Send-Q Local Address:Port Peer Address:Port

LISTEN 0 50 :::514 :::\* users:(("java",10155,131))

Otherwise, you must restart tomcat server.

Make sure from the VPN server, the Tomcat is able to receive the syslog information.

logger “test”

To troubleshoot syslog:

<https://www.loggly.com/docs/troubleshooting-rsyslog/>

sudo apt-get install syslog-ng

/etc/syslog-ng/syslog-ng.conf

1. **install postgresql**

Ubuntu 16.04

sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt/ `lsb\_release -cs`-pgdg main" >> /etc/apt/sources.list.d/pgdg.list'

wget -q https://www.postgresql.org/media/keys/ACCC4CF8.asc -O - | sudo apt-key add -

sudo apt-get update

sudo apt-get install postgresql postgresql-contrib

/etc/postgresql/9.5/main/pg\_hba.conf

/etc/postgresql/9.6/main/pg\_hba.conf

Ubuntu 14.04

/etc/postgresql/9.3/main/pg\_hba.conf

append the following to the end of above file:

host all all 0.0.0.0/0 trust

username : Ubuntu

password: Mi123456123qwe

Now edit postgresql.conf (PostgreSQL configuration) that's located in the same directory.

**$** vim postgresql.conf

Wildcard the listen address:

listen\_addresses = '\*'

sudo -u postgres psql postgres

create the following username & password:

username="admin"

password="renojeaj72"

postgres=# CREATE ROLE admin SUPERUSER LOGIN;

ALTER USER "admin" WITH PASSWORD 'renojeaj72';

\q to exit console

CREATE ROLE root SUPERUSER LOGIN;

ALTER USER "root" WITH PASSWORD 'passw0rd123';

ALTER USER "postgres" WITH PASSWORD 'Mi123456';

To troubleshoot active connections to psql server:

[**select**](http://www.postgresql.org/docs/9.5/static/sql-select.html) \* from pg\_stat\_activity where datname = 'IoT'

SHOW config\_file;

nano /etc/postgresql/9.5/main/postgresql.conf

modify

max\_connections=1000

Number of active connections and remaining connections

select max\_conn,used,res\_for\_super,max\_conn-used-res\_for\_super res\_for\_normal

from

(select count(\*) used from pg\_stat\_activity) t1,

(select setting::int res\_for\_super from pg\_settings where name=$$superuser\_reserved\_connections$$) t2,

(select setting::int max\_conn from pg\_settings where name=$$max\_connections$$) t3

show the PIDs and current queries of all server processes:

SELECT pg\_stat\_get\_backend\_pid(s.backendid) AS procpid,

pg\_stat\_get\_backend\_activity(s.backendid) AS current\_query

FROM (SELECT pg\_stat\_get\_backend\_idset() AS backendid) AS s;

To check number of connections:

[**select**](http://www.postgresql.org/docs/9.5/static/sql-select.html) max\_conn,used,res\_for\_super,max\_conn-used-res\_for\_super res\_for\_normal   
from   
 ([**select**](http://www.postgresql.org/docs/9.5/static/sql-select.html) [**count**](http://www.postgresql.org/docs/9.5/static/functions-aggregate.html)(\*) used from pg\_stat\_activity) t1,  
 ([**select**](http://www.postgresql.org/docs/9.5/static/sql-select.html) setting::int res\_for\_super from pg\_settings where name=$$superuser\_reserved\_connections$$) t2,  
 ([**select**](http://www.postgresql.org/docs/9.5/static/sql-select.html) setting::int max\_conn from pg\_settings where name=$$max\_connections$$) t3

find long-running transactions:

[**SELECT**](http://www.postgresql.org/docs/9.5/static/sql-select.html) \* FROM pg\_stat\_activity ORDER BY xact\_start ASC;

To stop a process:

[**SELECT**](http://www.postgresql.org/docs/9.5/static/sql-select.html) [**pg\_cancel\_backend**](http://www.postgresql.org/docs/9.5/static/functions-admin.html)(15725) FROM pg\_stat\_activity WHERE datname **=** *'IoT'*;

If the you find the process is stuck you can kill it by running:

SELECT pg\_terminate\_backend(\_\_pid\_\_);

ufw disable

allow IP & port at AWS/Azure

check if the port at psql server is open:

<http://www.yougetsignal.com/tools/open-ports/>

[make Postgres start automatically on boot](https://askubuntu.com/questions/539187/how-to-make-postgres-start-automatically-on-boot)

sudo update-rc.d postgresql enable

sudo /etc/init.d/postgresql restart

1. **Install Nginx**

sudo apt-get update

sudo apt-get install nginx

sudo nano /etc/nginx/nginx.conf

add the following to it

server {

listen 80;

server\_name localhost;

#charset koi8-r;

#access\_log logs/host.access.log main;

location / {

proxy\_read\_timeout 300;

proxy\_pass http://127.0.0.1:8080/IoTSecureContainer/;

proxy\_http\_version 1.1;

proxy\_set\_header Upgrade $http\_upgrade;

proxy\_set\_header Connection "upgrade";

}

location /IoT {

alias /home/web;

}

}

sudo nginx –s stop

sudo nginx

sudo nano /etc/profile

在末尾加入

export JAVA\_HOME=/usr/local/jdk1.8.0\_131

export PATH=$JAVA\_HOME/bin:$PATH

export CLASSPATH=.:$JAVA\_HOME/lib/dt.jar:$JAVA\_HOME/lib/tools.jar

TOMCAT\_HOME=/usr/local/apache-tomcat-7.0.59

然后

source /etc/profile

sudo cp -p /usr/local/apache-tomcat-7.0.59/bin/catalina.sh /etc/init.d/tomcat

在 /etc/init.d/tomcat中加入

JAVA\_HOME=/usr/local/jdk1.8.0\_131

CATALINA\_HOME=/usr/local/apache-tomcat-7.0.59

在context.xml中将<Context >改成<Context sessionCookiePath="/">

sudo apt-get install sysv-rc-conf

sudo chmod 755 /etc/init.d/tomcat

sudo service tomcat start

1. **Time synchronization at VPN Server**

~~sudo timedatectl set-timezone America/Los\_Angeles~~

Any idea how I change from IST to GMT?

To switch to UTC, simply execute sudo dpkg-reconfigure tzdata, scroll to the bottom of the Continents list and select Etc or None of the above; in the second list, select UTC. If you prefer GMT instead of UTC, it's just above UTC in that list. :)

timedatectl

Output

Local time: Wed 2017-04-26 17:20:07 UTC

Universal time: Wed 2017-04-26 17:20:07 UTC

RTC time: Wed 2017-04-26 17:20:07

Time zone: Etc/UTC (UTC, +0000)

Network time on: yes

NTP synchronized: yes

RTC in local TZ: no

If NTP synchronized : No

sudo apt install ntp

sudo timedatectl set-ntp on

sudo service ntp restart

<https://www.digitalocean.com/community/tutorials/how-to-set-up-time-synchronization-on-ubuntu-16-04>

<https://help.ubuntu.com/lts/serverguide/NTP.html>