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Day - 6

### Task 1 - Backing up Databases and importing the backup to another DB:

◆ Mysql

- Here, I have already have database. So, in this task I used employees database.  
**show databases;**

```
mysql> show databases;
+-----+
| Database |
+-----+
| demodb   |
| employees|
| information_schema |
| mysql    |
| performance_schema |
| sys      |
+-----+
6 rows in set (0.02 sec)
```

- Now, show all the tables in employees database using below command:  
**use employees**  
**show tables;**

```
mysql> use employees
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_employees |
+-----+
| current_dept_emp    |
| departments          |
| dept_emp            |
| dept_emp_latest_date |
| dept_manager        |
| employees            |
| salaries            |
| titles              |
+-----+
8 rows in set (0.01 sec)

mysql> █
```

- Now, To take backup of employees database use below command:  
**sudo mysqldump -u root -p employees > datadump.sql**

After that enter root password.

```
root@nishit-VirtualBox:~# sudo mysqldump -u root -p employees > datadump.sql
Enter password:
```

- Next is we need this backup file into another virtual box so for that we need to write below command in 1<sup>st</sup> virtualbox.

**sudo scp datadump.sql nishit@192.168.10.142:Desktop/**

Use of scp for securely copy files/folder on a same network.

After that back file name

Enter destination username and their ip

And atlast give the location in that we want store backup file.

```
root@nishit-VirtualBox:~# sudo scp datadump.sql nishit1@192.168.10.142:Desktop/
The authenticity of host '192.168.10.142 (192.168.10.142)' can't be established.
ECDSA key fingerprint is SHA256:PlsqGn9xBoJ67fN3gWDZTKaqe5W6I50H7NgUfoiAfIY.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.10.142' (ECDSA) to the list of known hosts.
nishit1@192.168.10.142's password:
datadump.sql                                100% 161MB 46.5MB/s 00:03
root@nishit-VirtualBox:~#
```

- Now, check in virtualbox 2 our backup file is present or not.

```
nishit1@nishit1-VirtualBox:~/Desktop$
nishit1@nishit1-VirtualBox:~/Desktop$ ls
datadump.sql
```

- To restore backup file on virtualbox first we need to create one database.  
**create database employee;**

```
mysql> create database employee;
Query OK, 1 row affected (0.06 sec)
```

- Restore database using below command:  
**sudo mysql -u root -p databasename < filename**  
**sudo mysql -u root -p employee < datadump.sql**

```
nishit1@nishit1-VirtualBox:~/Desktop$ sudo mysql -u root -p employee < datadump.sql
Enter password:
```

- Now, check our file is restore on database or not.  
**show tables;**

```
mysql> show tables;
+-----+
| Tables_in_employee |
+-----+
| current_dept_emp    |
| departments         |
| dept_emp            |
| dept_emp_latest_date |
| dept_manager        |
| employees           |
| salaries            |
| titles              |
+-----+
8 rows in set (0.00 sec)

mysql> 
```

## ◆ Mongo DB

- Create one database and add some collection in that.

**Use demodb**

**db.createCollection('Age')**

**db.createCollection('Name')**

**db.createCollection('Number')**

**db.createCollection('Address')**

```
> use demodb
switched to db demodb
```

```
> db.createCollection('Age')
{ "ok" : 1 }
> db.createCollection('Name')
{ "ok" : 1 }
> db.createCollection('Number')
{ "ok" : 1 }
> db.createCollection('Address')
{ "ok" : 1 }
```

show collections

```
> show collections
Address
Age
Name
Number
> █
```

- Now take backup of demodb database

**mongodump --archive=backup.archive --gzip --db demodb**

**mongodump --archive=filename --gzip --db databasename**

```
root@nishit-VirtualBox:~# mongodump --archive=backup.archive --gzip --db demodb
2023-02-24T16:22:14.701+0530   writing demodb.Address to archive 'backup.archive'
2023-02-24T16:22:14.710+0530   writing demodb.Number to archive 'backup.archive'
2023-02-24T16:22:14.713+0530   done dumping demodb.Number (0 documents)
2023-02-24T16:22:14.713+0530   writing demodb.Age to archive 'backup.archive'
2023-02-24T16:22:14.727+0530   writing demodb.Name to archive 'backup.archive'
2023-02-24T16:22:14.728+0530   done dumping demodb.Address (0 documents)
2023-02-24T16:22:14.729+0530   done dumping demodb.Name (0 documents)
2023-02-24T16:22:14.729+0530   done dumping demodb.Age (0 documents)
root@nishit-VirtualBox:~# ls
backup.archive  datadump.sql  demo.sh  dump  mysqlbackup.sql  snap  test_db
```

- Next is we need this backup file into another virtual box so for that we need to write below command in 1<sup>st</sup> virtualbox.

**scp backup.archive [nishit1@192.168.10.142](mailto:nishit1@192.168.10.142):Desktop/**

```
root@nishit-VirtualBox:~# scp backup.archive nishit1@192.168.10.142:Desktop/
nishit1@192.168.10.142's password:
backup.archive
 100% 483 704.4KB/s 00:00
```

- Now, check in virtualbox 2 our backup file is present or not.

```
nishit1@nishit1-VirtualBox:~/Desktop$ ls
backup.archive  datadump.sql
nishit1@nishit1-VirtualBox:~/Desktop$ █
```

- Restore database using below command:

**mongorestore --db demodb --archive=backup.archive --gzip**

**mongorestore --db database\_name --archive=backupfilename --gzip**

```

nishit1@nishit1-VirtualBox:~/Desktop$ mongorestore --db demodb --archive=backup.archive --gzip
2023-02-24T17:24:07.854+0530 The --db and --collection flags are deprecated for this use-case; please use
e --nsInclude instead, i.e. with --nsInclude=${DATABASE}.${COLLECTION}
2023-02-24T17:24:07.860+0530 preparing collections to restore from
2023-02-24T17:24:07.877+0530 reading metadata for demodb.Address from archive 'backup.archive'
2023-02-24T17:24:07.877+0530 reading metadata for demodb.Number from archive 'backup.archive'
2023-02-24T17:24:07.877+0530 reading metadata for demodb.Name from archive 'backup.archive'
2023-02-24T17:24:07.877+0530 reading metadata for demodb.Age from archive 'backup.archive'
2023-02-24T17:24:07.972+0530 restoring demodb.Number from archive 'backup.archive'
2023-02-24T17:24:07.989+0530 finished restoring demodb.Number (0 documents, 0 failures)
2023-02-24T17:24:08.107+0530 restoring demodb.Age from archive 'backup.archive'
2023-02-24T17:24:08.134+0530 finished restoring demodb.Age (0 documents, 0 failures)
2023-02-24T17:24:08.237+0530 restoring demodb.Address from archive 'backup.archive'
2023-02-24T17:24:08.347+0530 finished restoring demodb.Address (0 documents, 0 failures)
2023-02-24T17:24:08.334+0530 restoring demodb.Name from archive 'backup.archive'
2023-02-24T17:24:08.347+0530 finished restoring demodb.Name (0 documents, 0 failures)
2023-02-24T17:24:08.347+0530 no indexes to restore for collection demodb.Address
2023-02-24T17:24:08.347+0530 no indexes to restore for collection demodb.Number
2023-02-24T17:24:08.347+0530 no indexes to restore for collection demodb.Name
2023-02-24T17:24:08.348+0530 no indexes to restore for collection demodb.Age
2023-02-24T17:24:08.348+0530 0 document(s) restored successfully. 0 document(s) failed to restore.
nishit1@nishit1-VirtualBox:~/Desktop$

```

➤ Now, check our file is restore on database or not.

**Show dbs**

**use demodb**

**show collections**

```

> show dbs
admin    0.000GB
config  0.000GB
demo     0.000GB
demodb   0.000GB
local    0.000GB
> use demodb
switched to db demodb
> show collections
Address
Age
Name
Number
>

```

## Task 2 - Webmin

### ◆ Run Webmin on 8000

- First to install webmin we need add webmin repository in /etc/apt/sources.list file.

**sudo nano /etc/apt/sources.list**

Add below line in file to download repository.

**deb http://download.webmin.com/download/repository sarge contrib**

```
nishit@nishit-VirtualBox:~$ sudo nano /etc/apt/sources.list
```

```
deb http://download.webmin.com/download/repository sarge contrib
```

- Next, you'll add the Webmin PGP key so that your system will trust the new repository. In order to do that, though, you must install the gnupg1 package, which is GNU's tool for secure communication and data storage.
- Following that, download the Webmin PGP key with wget and add it to your system's list of keys:

**wget -q -O- http://www.webmin.com/jcameron-key.asc | sudo apt-key add**

```
nishit@nishit-VirtualBox:~$ wget -q -O- http://www.webmin.com/jcameron-key.asc | sudo apt-key add
OK
```

- Update package using below command:

**sudo apt update**

```
nishit@nishit-VirtualBox:~$ sudo apt update
Ign:1 http://repo.mongodb.org/apt/ubuntu focal/mongodb-org/5.0 InRelease
Ign:2 https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/6.0 InRelease
Hit:3 https://deb.nodesource.com/node_16.x focal InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:5 http://repo.mongodb.org/apt/ubuntu focal/mongodb-org/5.0 Release
Hit:6 http://in.archive.ubuntu.com/ubuntu focal InRelease
Hit:7 https://dl.google.com/linux/chrome/deb stable InRelease
Hit:8 https://repo.mongodb.org/apt/ubuntu focal/mongodb-org/6.0 Release
Hit:9 http://in.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:10 http://ppa.launchpad.net/ondrej/php/ubuntu focal InRelease
Hit:11 http://in.archive.ubuntu.com/ubuntu focal-backports InRelease
Ign:14 http://download.webmin.com/download/repository sarge InRelease
Get:15 http://download.webmin.com/download/repository sarge Release [16.9 kB]
Get:16 http://download.webmin.com/download/repository sarge Release.gpg [173 B]
Get:17 http://download.webmin.com/download/repository sarge/contrib i386 Packages [1,400 B]
Get:18 http://download.webmin.com/download/repository sarge/contrib amd64 Packages [1,400 B]
Fetched 19.8 kB in 3s (7,644 B/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
56 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

- Install webmin using below command:

**sudo apt install webmin**

```
nishit@nishit-VirtualBox:~$ sudo apt install webmin
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libc-ares2 libpcr2-posix2 libzip5 php7.4-dev php7.4-gd php7.4-mysql php7.4-xml php7.4-xmlrpc php7.4-zip
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libauthen-pam-perl libio-pty-perl
The following NEW packages will be installed:
  libauthen-pam-perl libio-pty-perl webmin
0 upgraded, 3 newly installed, 0 to remove and 56 not upgraded.
Need to get 34.3 MB of archives.
After this operation, 193 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 libauthen-pam-perl amd64 0.16-3build7 [24.3 kB]
Get:2 http://download.webmin.com/download/repository sarge/contrib amd64 webmin all 2.013 [34.3 MB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal/main amd64 libio-pty-perl amd64 1:1.12-1 [32.4 kB]
Fetched 34.3 MB in 7s (5,233 kB/s)
Selecting previously unselected package libauthen-pam-perl.
(Reading database ... 201702 files and directories currently installed.)
Preparing to unpack .../libauthen-pam-perl_0.16-3build7_amd64.deb ...
Unpacking libauthen-pam-perl (0.16-3build7) ...
Selecting previously unselected package libio-pty-perl.
Preparing to unpack .../libio-pty-perl_1%3a1.12-1_amd64.deb ...
Unpacking libio-pty-perl (1:1.12-1) ...
Selecting previously unselected package webmin.
Preparing to unpack .../archives/webmin_2.013_all.deb ...
Unpacking webmin (2.013) ...
Setting up libio-pty-perl (1:1.12-1) ...
Setting up libauthen-pam-perl (0.16-3build7) ...
Setting up webmin (2.013) ...
Processing triggers for man-db (2.9.1-1) ...
```

- Open webmin configuration file and change port as 8000.

**sudo nano /etc/webmin/miniserv.conf**

**port=8000**

```
nishit@nishit-VirtualBox:~$ sudo nano /etc/webmin/miniserv.conf
```

```
port=8000
```

- Now restart webmin and allow port 8000 for incoming traffic:

**sudo service webmin restart**

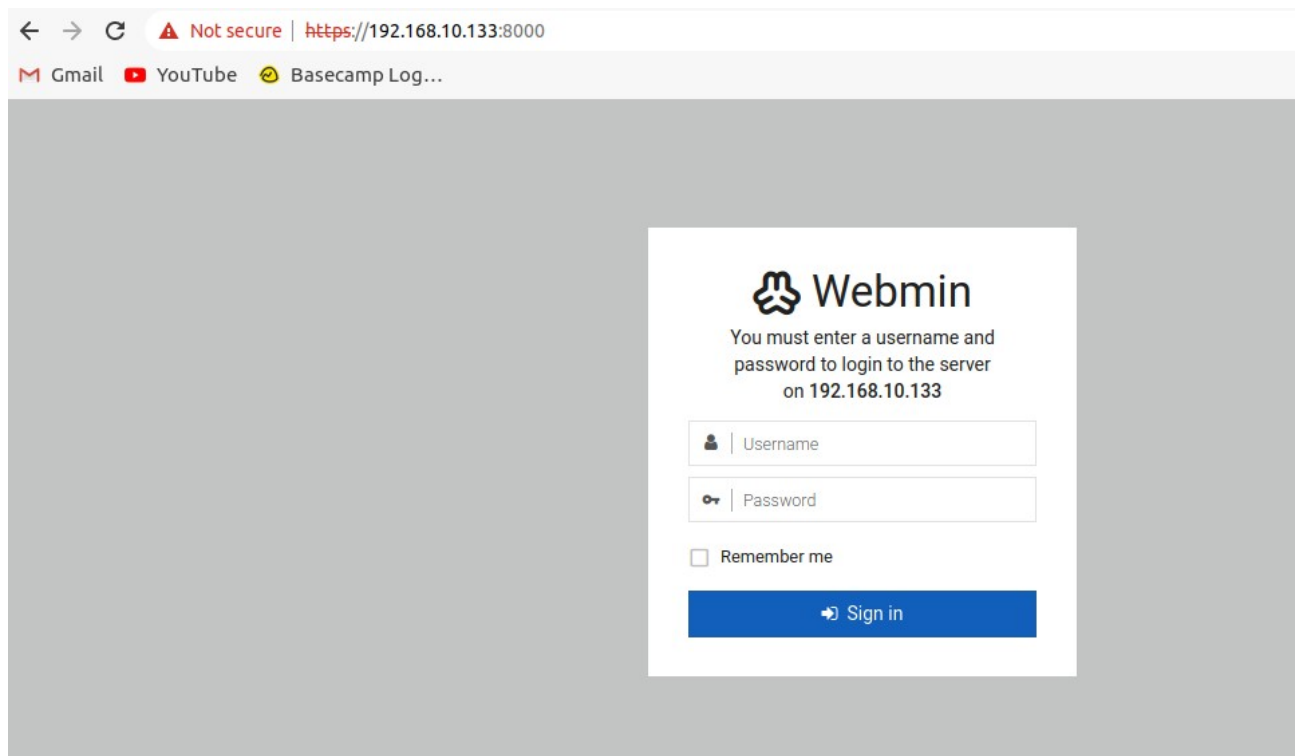
**sudo ufw allow 8000/tcp**

```
nishit@nishit-VirtualBox:~$ sudo service webmin restart
nishit@nishit-VirtualBox:~$ sudo ufw allow 8000/tcp
Rule added
Rule added (v6)
```

- Now, check the result using our\_server\_ip:8000

**192.168.10.133:8000**





◆ Reset script for Webmin Password.

- Create one shell script using below command.

```
sudo nano passreset.sh
```

```
nishit@nishit-VirtualBox:~$ sudo nano passreset.sh
```

- Now add below commands in script file.

```
#!/bin/bash
```

```
# Enter the username for which you want to reset the password
```

```
read -p "Enter the username for which you want to reset the password: " username
```

```
# Enter the new password for the user
```

```
read -sp "Enter the new password for the user: " new_password
```

```
# Run the command to reset the password
```

```
sudo /var/www/html/webmin/changepass.pl /etc/webmin/ $username $new_password
```

- In above script first I write command to take user name in which we want change the password. After that take new password from user. After that give path of changepass.pl file and apply into /etc/webmin file.



```
GNU nano 4.8                                passreset.sh
#!/bin/bash

# Enter the username for which you want to reset the password
read -p "Enter the username for which you want to reset the password: " username

# Enter the new password for the user
read -sp "Enter the new password for the user: " new_password

# Run the command to reset the password
sudo /var/www/html/webmin/changepass.pl /etc/webmin/ $username $new_password
```

- Now give execute permission to script.

**sudo chmod +x passreset.sh**

```
nishit@nishit-VirtualBox:~$ sudo chmod +x passreset.sh
nishit@nishit-VirtualBox:~$ ls -la passreset.sh
-rwxr-xr-x 1 root root 375 Feb 23 15:44 passreset.sh
nishit@nishit-VirtualBox:~$
```

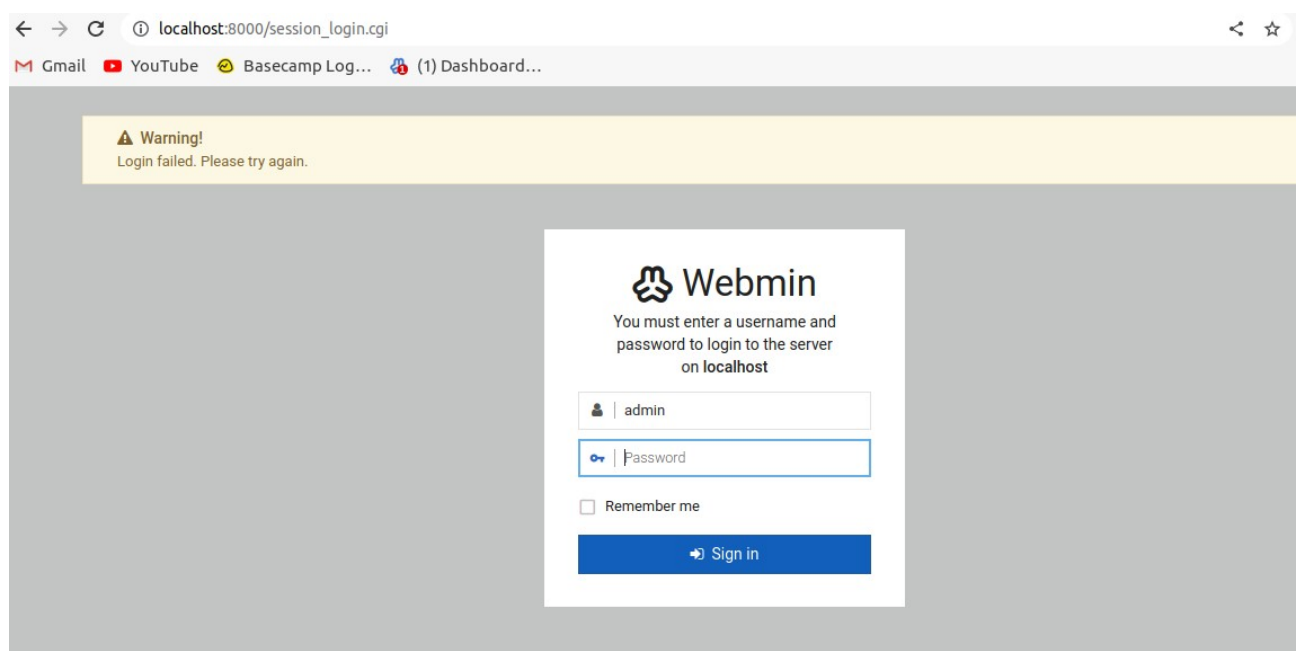
- Now, run script using below command:

**sudo bash passreset.sh**

```
nishit@nishit-VirtualBox:~$ sudo bash passreset.sh
Enter the username for which you want to reset the password: admin
Enter the new password for the user: Password for Webmin user admin updated successfully
nishit@nishit-VirtualBox:~$
```

I reset admin password and check the result.

- Here below I use old password to login so not able to login.



➤ Now, use updated password to login and login successfully.

