

# Lab 10

Network configuration basics - ii

1. Use 'dig' command

Aug 9 23:35



momik@ubuntu-desktop: ~



```
momik@ubuntu-desktop:~$ dig youtube.com
```

```
;; <<>> DiG 9.18.28-0ubuntu0.24.04.1-Ubuntu <<>> youtube.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 12821
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags::; udp: 65494
;; QUESTION SECTION:
;youtube.com.                IN      A
```

```
;; ANSWER SECTION:
youtube.com.                239     IN      A      172.217.31.206
```

```
;; Query time: 8 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Fri Aug 09 23:35:54 +0545 2024
;; MSG SIZE rcvd: 56
```

```
momik@ubuntu-desktop:~$
```

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momik@ubuntu-desktop: ~



```
momik@ubuntu-desktop:~$ dig youtube.com MX
```

```
;; <<>> DiG 9.18.28-0ubuntu0.24.04.1-Ubuntu <<>> youtube.com MX
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 16582
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:;; udp: 65494
;; QUESTION SECTION:
;youtube.com.                IN      MX

;; ANSWER SECTION:
youtube.com.                300     IN      MX      0 smtp.google.com.

;; Query time: 89 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Fri Aug 09 23:36:23 +0545 2024
;; MSG SIZE rcvd: 68
```

```
momik@ubuntu-desktop:~$
```

## **2. Start/Stop/Status/Restart Services/Daemons**

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momik@ubuntu-desktop: ~

```
momik@ubuntu-desktop:~$ sudo systemctl stop apache2
```

```
[sudo] password for momik:
```

```
momik@ubuntu-desktop:~$ sudo systemctl status apache2
```

```
○ apache2.service - The Apache HTTP Server
```

```
Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
```

```
Active: inactive (dead) since Fri 2024-08-09 23:37:18 +0545; 3s ago
```

```
Duration: 34min 55.157s
```

```
Docs: https://httpd.apache.org/docs/2.4/
```

```
Process: 11644 ExecStop=/usr/sbin/apachectl graceful-stop (code=exited, status=0/SUCCESS)
```

```
Main PID: 8925 (code=exited, status=0/SUCCESS)
```

```
CPU: 314ms
```

```
Aug 09 23:02:23 ubuntu-desktop systemd[1]: Starting apache2.service - The Apache HTTP Server...
```

```
Aug 09 23:02:23 ubuntu-desktop apachectl[8924]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please see the /etc/httpd/conf/httpd.conf file for instructions on how to resolve this problem
```

```
Aug 09 23:02:23 ubuntu-desktop systemd[1]: Started apache2.service - The Apache HTTP Server.
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: Stopping apache2.service - The Apache HTTP Server...
```

```
Aug 09 23:37:18 ubuntu-desktop apachectl[11646]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please see the /etc/httpd/conf/httpd.conf file for instructions on how to resolve this problem
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: apache2.service: Deactivated successfully.
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: Stopped apache2.service - The Apache HTTP Server.
```

```
momik@ubuntu-desktop:~$ sudo systemctl disable apache2
```

```
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
```

```
Executing: /usr/lib/systemd/systemd-sysv-install disable apache2
```

```
Removed "/etc/systemd/system/multi-user.target.wants/apache2.service".
```

```
momik@ubuntu-desktop:~$ sudo systemctl status apache2
```

```
○ apache2.service - The Apache HTTP Server
```

```
Loaded: loaded (/usr/lib/systemd/system/apache2.service; disabled; preset: enabled)
```

```
Active: inactive (dead) since Fri 2024-08-09 23:37:18 +0545; 17s ago
```

```
Duration: 34min 55.157s
```

```
Docs: https://httpd.apache.org/docs/2.4/
```

```
Main PID: 8925 (code=exited, status=0/SUCCESS)
```

```
CPU: 314ms
```

```
Aug 09 23:02:23 ubuntu-desktop systemd[1]: Starting apache2.service - The Apache HTTP Server...
```

```
Aug 09 23:02:23 ubuntu-desktop apachectl[8924]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please see the /etc/httpd/conf/httpd.conf file for instructions on how to resolve this problem
```

```
Aug 09 23:02:23 ubuntu-desktop systemd[1]: Started apache2.service - The Apache HTTP Server.
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: Stopping apache2.service - The Apache HTTP Server...
```

```
Aug 09 23:37:18 ubuntu-desktop apachectl[11646]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please see the /etc/httpd/conf/httpd.conf file for instructions on how to resolve this problem
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: apache2.service: Deactivated successfully.
```

```
Aug 09 23:37:18 ubuntu-desktop systemd[1]: Stopped apache2.service - The Apache HTTP Server.
```

```
lines 1-15/15 (END) ...skipping...
```

### **3. Create Cron Job to Backup File**

Aug 9 23:38

momik@ubuntu-desktop: ~

```
momik@ubuntu-desktop:~$ crontab -e
no crontab for momik - using an empty one
```

```
Select an editor. To change later, run 'select-editor'.
```

1. /bin/nano <---- easiest
2. /usr/bin/vim.tiny
3. /bin/ed

```
Choose 1-3 [1]:
```



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momik@ubuntu-desktop: ~

GNU nano 7.2

/tmp/crontab.27bT3c/crontab \*

```
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
m h dom mon dow   command
0 2 * * * cp ~/Downloads ~/Backup
```



^G Help  
^X Exit

^O Write Out  
^R Read File

^W Where Is  
^\_ Replace

^K Cut  
^U Paste

^T Execute  
^J Justify

^C Location  
^\_ Go To Line

M-U Undo  
M-E Redo

## **4. SSH**



root@postgres-client: ~



momik@iigris:~\$ ssh root@64.227.137.52

Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-36-generic x86\_64)

\* Documentation: <https://help.ubuntu.com>  
\* Management: <https://landscape.canonical.com>  
\* Support: <https://ubuntu.com/pro>

System information as of Fri Aug 9 17:55:34 UTC 2024

System load:	0.0	Processes:	126
Usage of /:	52.5% of 57.99GB	Users logged in:	0
Memory usage:	24%	IPv4 address for eth0:	64.227.137.52
Swap usage:	0%	IPv4 address for eth0:	10.47.0.6

Expanded Security Maintenance for Applications is not enabled.

29 updates can be applied immediately.

To see these additional updates run: `apt list --upgradable`

Enable ESM Apps to receive additional future security updates.

See <https://ubuntu.com/esm> or run: `sudo pro status`

\*\*\* System restart required \*\*\*

## **5. SCP**



momik@iigris: ~



```
momik@iigris:~$ scp root@64.227.137.52:/root/csc_stage.sql ~/Downloads  
csc_stage.sql
```

1% 1530KB 1.5MB/s 00:52 ETA

## **6. FTP**



momik@iigris: ~



```
momik@iigris:~$ ftp google.com
```

```
Trying [2404:6800:4007:820::200e]:21 ...
```

