

## LAB 4 (PHP & LogRotate)

**Ahmed Ashraf Ibrahim**

```
Activities Terminal Jan 4 20:19
ahmed09ashraf@Ubuntu-2: ~
ahmed09ashraf@Ubuntu-2:~/Desktop$ cd ..
ahmed09ashraf@Ubuntu-2:~$ sudo apt-get install php8.1
[sudo] password for ahmed09ashraf:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
  systemd-hwe-hwdb
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapache2-mod-php8.1
  libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap php-common
  php8.1-cli php8.1-common php8.1-opcache php8.1-readline
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
  php-pear
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapache2-mod-php8.1
  libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap php-common
  php8.1 php8.1-cli php8.1-common php8.1-opcache php8.1-readline
0 upgraded, 15 newly installed, 0 to remove and 237 not upgraded.
Need to get 7,040 kB of archives.
After this operation, 29.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 libapr1 amd64 1.7.0-
8build1 [107 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1 amd64 1.
6.1-5ubuntu4 [92.4 kB]
Get:3 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 libaprutil1-dbd-sqli
```

```
Activities Terminal Jan 4 20:20
ahmed09ashraf@Ubuntu-2: ~
ahmed09ashraf@Ubuntu-2:~$ php -v
PHP 8.1.2-1ubuntu2.9 (cli) (built: Oct 19 2022 14:58:09) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1ubuntu2.9, Copyright (c), by Zend Technologies
ahmed09ashraf@Ubuntu-2:~$
```

## To Get Weather API From OpenWeather :

The screenshot shows the OpenWeather dashboard. At the top, there's a navigation bar with the OpenWeather logo and various links: Weather in your city, Guide, API, Dashboard, Marketplace, Pricing, Maps, Our Initiatives, Partners, Blog, For Business, Ahmed, and Support. A green notice box says "API key was deleted successfully". Below the navigation bar, there's a section for "API keys" with a sub-header "You can generate as many API keys as needed for your subscription. We accumulate the total load from all of them." A table lists API keys with columns: Key, Name, Status, and Actions. One key is highlighted with a red box: Key: 4847eee276e6386a576e1dc234ea027c, Name: Weather, Status: Active, Actions: [toggle icon] [edit icon]. To the right of the table is a "Create key" form with a text input for "API key name" and a "Generate" button.

Key	Name	Status	Actions
4847eee276e6386a576e1dc234ea027c	Weather	Active	[toggle icon] [edit icon]

This is a partial screenshot of the OpenWeather dashboard navigation bar, showing the logo and links: Weather in your city, Guide, API, Dashboard, Marketplace, Pricing, Maps, and Our Initiatives.

### How to make an API call

#### API call

```
https://api.openweathermap.org/data/3.0/onecall?lat={lat}&lon={lon}&exclude={part}&appid={API key}
```

#### Parameters

lat, lon	required	Geographical coordinates (latitude, longitude). If you need the geocoder to automatic convert city names and zip-codes to geo coordinates and the other way around, please use our <a href="#">Geocoding API</a> .
appid	required	Your unique API key (you can always find it on your account page under the "API key" tab)
exclude	optional	By using this parameter you can exclude some parts of the weather data from the API response. It should be a comma-delimited list (without spaces). Available values:

## Obj Of API In 2 Browsers :-

The screenshot shows a web browser window with the URL `https://api.openweathermap.org/data/2.5/weather?lat=30&lon=30&appid=4847eee276e6386a576e1dc234ea027c`. The response is displayed as a JSON object:

```
{
  "coord": {
    "lon": 30,
    "lat": 30
  },
  "weather": [
    {
      "id": 800,
      "main": "Clear",
      "description": "clear sky",
      "icon": "01d"
    }
  ],
  "base": "stations",
  "main": {
    "temp": 290.09,
    "feels_like": 289.22,
    "temp_min": 290.09,
    "temp_max": 290.09,
    "pressure": 1023,
    "humidity": 53,
    "sea_level": 1023,
    "grnd_level": 1007,
    "visibility": 10000
  },
  "wind": {
    "speed": 4.77,
    "deg": 283,
    "gust": 4.61
  },
  "clouds": {
    "all": 0
  },
  "dt": 1672912260,
  "sys": {
    "country": "EG",
    "sunrise": 1672894590,
    "sunset": 1672931609,
    "timezone": 7200,
    "id": 353223,
    "name": "Madinat as Sâdât",
    "cod": 200
  }
}
```

The second screenshot shows the same API response in a web browser with a JSON viewer extension. The response is displayed in a tree view, showing the following structure:

- `coord`:
  - `lon`: 30
  - `lat`: 30
- `weather`:
  - `0`:
    - `id`: 800
    - `main`: "Clear"
    - `description`: "clear sky"
    - `icon`: "01d"
- `base`: "stations"
- `main`:
  - `temp`: 290.09
  - `feels_like`: 289.22
  - `temp_min`: 290.09
  - `temp_max`: 290.09
  - `pressure`: 1023
  - `humidity`: 53
  - `sea_level`: 1023
  - `grnd_level`: 1007
  - `visibility`: 10000
- `wind`:
  - `speed`: 4.77
  - `deg`: 283
  - `gust`: 4.61
- `clouds`:
  - `all`: 0
- `dt`: 1672912260
- `sys`:
  - `country`: "EG"
  - `sunrise`: 1672894590
  - `sunset`: 1672931609
  - `timezone`: 7200
  - `id`: 353223
  - `name`: "Madinat as Sâdât"
  - `cod`: 200



```
Activities Terminal Jan 5 13:25
ahmed09ashraf@Ubuntu-2: ~
GNU nano 6.2 task.sh *
while true
do
echo "-----"
date +"Today Is : %A %d %B"
echo "-----"
date +"Time Is : %T %p"
echo "-----"
echo "Wheather API is : "
echo ""
curl -X GET "https://api.openweathermap.org/data/2.5/weather?lat=30&lon=30&appi
sleep 5
echo "-----"
done
```

```
Activities Terminal Jan 5 13:27
ahmed09ashraf@Ubuntu-2: ~
ahmed09ashraf@Ubuntu-2:~$ nano task.sh
ahmed09ashraf@Ubuntu-2:~$ ./task.sh
-----
Today Is : Thursday 05 January
-----
Time Is : 13:26:36 PM
-----
Wheather API is :
{"coord":{"lon":30,"lat":30},"weather":[{"id":800,"main":"Clear","description":
"clear sky","icon":"01d"}],"base":"stations","main":{"temp":290.6,"feels_like":
289.65,"temp_min":290.6,"temp_max":290.6,"pressure":1022,"humidity":48,"sea_lev
el":1022,"grnd_level":1006},"visibility":10000,"wind":{"speed":5.04,"deg":289,"
gust":4.92},"clouds":{"all":0},"dt":1672917997,"sys":{"country":"EG","sunrise":
1672894590,"sunset":1672931609},"timezone":7200,"id":353223,"name":"Madinat as
Sādāt","cod":200}./task.sh: line 12: echo-----: com
mand not found
-----
Today Is : Thursday 05 January
-----
Time Is : 13:26:42 PM
-----
Wheather API is :
{"coord":{"lon":30,"lat":30},"weather":[{"id":800,"main":"Clear","description":
"clear sky","icon":"01d"}],"base":"stations","main":{"temp":290.6,"feels_like":
289.65,"temp_min":290.6,"temp_max":290.6,"pressure":1022,"humiditv":48,"sea lev
```

```
Sādāt", "cod": 200}^Cahmed09ashraf@Ubuntu-2:~$ nano task.sh
ahmed09ashraf@Ubuntu-2:~$ sudo nano /etc/logrotate.d/weather
ahmed09ashraf@Ubuntu-2:~$ ./task.sh > /tmp/weather.log
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    472      0  0:00:01  0:00:01 --:--:--   473
^Cahmed09ashraf@Ubuntu-2:~$ ./task.sh >> /tmp/weather.log
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    436      0  0:00:01  0:00:01 --:--:--   437
^Cahmed09ashraf@Ubuntu-2:~$ nano task.sh
ahmed09ashraf@Ubuntu-2:~$ ./task.sh >> /tmp/weather.log
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    400      0  0:00:01  0:00:01 --:--:--   400
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    564      0  0:00:01  0:00:01 --:--:--   564
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    566      0  0:00:01  0:00:01 --:--:--   566
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total     Spent    Left     Speed
100    494    100    494    0      0    584      0  0:00:01  0:00:01 --:--:--   583
```

```
Activities Terminal Jan 5 13:31
ahmed09ashraf@Ubuntu-2: ~
ahmed09ashraf@Ubuntu-2:~$ sudo nano /etc/logrotate.d/weather
ahmed09ashraf@Ubuntu-2:~$ sudo logrotate /etc/logrotate.d/weather
ahmed09ashraf@Ubuntu-2:~$ ls /tmp
snap-private-tmp
systemd-private-b98a21321aee452788231d7922c1338a-apache2.service-I3pCGB
systemd-private-b98a21321aee452788231d7922c1338a-colord.service-uCbu3n
systemd-private-b98a21321aee452788231d7922c1338a-fwupd.service-OmsrXN
systemd-private-b98a21321aee452788231d7922c1338a-ModemManager.service-Wn2CGf
systemd-private-b98a21321aee452788231d7922c1338a-power-profiles-daemon.service-
Xu2XUF
systemd-private-b98a21321aee452788231d7922c1338a-switcheroo-control.service-A7b
CUF
systemd-private-b98a21321aee452788231d7922c1338a-systemd-logind.service-bBNMUH
systemd-private-b98a21321aee452788231d7922c1338a-systemd-oond.service-ZPgU6U
systemd-private-b98a21321aee452788231d7922c1338a-systemd-resolved.service-tQ0qc
i
systemd-private-b98a21321aee452788231d7922c1338a-systemd-timesyncd.service-A2D0
ES
systemd-private-b98a21321aee452788231d7922c1338a-upower.service-4EDDWD
tracker-extract-3-files.1000
tracker-extract-3-files.127
VMwareDnD
weather.log.1
ahmed09ashraf@Ubuntu-2:~$
ahmed09ashraf@Ubuntu-2:~$
ahmed09ashraf@Ubuntu-2:~$
```



Activities Terminal Jan 5 13:33

ahmed09ashraf@Ubuntu-2: ~

GNU nano 6.2 /etc/logrotate.d/weather

```
tmp/weather.log {
    rotate 3
    daily
    size 10k
    su ahmed09ashraf ahmed09ashraf
}
```

[ Read 6 lines ]

Help Write Out Where Is Cut Execute  
Exit Read File Replace Paste Justify

Activities Terminal Jan 5 13:31

ahmed09ashraf@Ubuntu-2: ~

```
ahmed09ashraf@Ubuntu-2:~$ sudo nano /etc/logrotate.d/weather
ahmed09ashraf@Ubuntu-2:~$ sudo logrotate /etc/logrotate.d/weather
ahmed09ashraf@Ubuntu-2:~$ ls /tmp
snap-private-tmp
systemd-private-b98a21321aee452788231d7922c1338a-apache2.service-I3pCG8
systemd-private-b98a21321aee452788231d7922c1338a-colord.service-uCbu3n
systemd-private-b98a21321aee452788231d7922c1338a-fwupd.service-0msrXN
systemd-private-b98a21321aee452788231d7922c1338a-ModemManager.service-Wn2CGf
systemd-private-b98a21321aee452788231d7922c1338a-power-profiles-daemon.service-
Xu2XUF
systemd-private-b98a21321aee452788231d7922c1338a-switcheroo-control.service-A7b
CUF
systemd-private-b98a21321aee452788231d7922c1338a-systemd-logind.service-bBNMUh
systemd-private-b98a21321aee452788231d7922c1338a-systemd-oomd.service-ZPgU6U
systemd-private-b98a21321aee452788231d7922c1338a-systemd-resolved.service-tQ0qc
i
systemd-private-b98a21321aee452788231d7922c1338a-systemd-timesyncd.service-A2D0
ES
systemd-private-b98a21321aee452788231d7922c1338a-upower.service-4EDDWD
tracker-extract-3-files.1000
tracker-extract-3-files.127
VMwareDnD
weather.log.1
ahmed09ashraf@Ubuntu-2:~$
ahmed09ashraf@Ubuntu-2:~$
ahmed09ashraf@Ubuntu-2:~$
```