

How to serve images with nginx

Asked 11 years, 6 months ago Modified 1 year, 9 months ago Viewed 116k times



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I am completely new to nginx and I am asked to find a way to serve Map Tiles that are separated according to the zoom levels. The image file structure is like `~/data/images/7/65/70.png` where 7 is the zoom level, 65 and 70 are the lon-lat values. The folder 65 contains many files such as 71.png, 72.png and etc.

I have installed Nginx properly and I can get `Welcome to nginx` message. I have followed the instructions in `http://nginx.org/en/docs/beginners_guide.html` and created the `/data/www` and `/data/images` directories. I have placed `index.html` file under `/data/www` and tile images under `/data/images`. Then I modified the configuration file by adding following lines in `http` tags:

```
server {  
    location / {  
        root /data/www;  
    }  
  
    location /images/ {  
        root /data;  
    }  
}
```

After reloading the config file and entering localhost on the browser I can neither get the `index.html` file nor see the images.

What I am trying to do is to display the image when I enter something as:

```
http://localhost/1.0.0/basemap/7/65/70.png
```

- 7: folder indicating 7th zoom level
- 65: folder indicating the latitude
- 70.png: file indicating the longitude (folder 65 includes many png files)

What am I missing?

configuration

nginx

configuration-files

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edited Sep 23, 2013 at 9:01

asked Sep 23, 2013 at 8:31



iso_9001_

2,881 ● 7 ● 34 ● 48

why create a new server block, what is the URL that you are planning to access these images by, are they still localhost or do you have a domain that points to your server – [Mohammad AbuShady](#) Sep 23, 2013 at 8:44 

- 1 they are localhost. there is no domain. I created the new server block because the beginner's guide says so – [iso_9001_](#) Sep 23, 2013 at 8:47

do you have a `sites-enabled` and `sites-available` folder inside `/etc/nginx` ?

– [Mohammad AbuShady](#) Sep 23, 2013 at 8:52

- 1 Yes, those folders are inside `/etc/nginx` and both have `default` file inside. I also edited the OP, please check – [iso_9001_](#) Sep 23, 2013 at 9:00

3 Answers

Sorted by: Highest score (default) 



35



Ok, let me explain something, you already have a localhost server, which is defined inside a file called `default` that is the file that causes the "Welcome to nginx" or something to appear, and I believe you can't create a new server with the same `server_name`, let's remove that and make your localhost serve only those images,

- First we need to delete the `default` file from `sites-enabled`, it will still exist inside `sites-available` if you ever want to get it back. (*note that all files inside `sites-enabled` are simply symlinks from the files inside `sites-available`*)
- We create a new file inside `sites-available` and call it whatever you want, `images-app` for example
- create the new server inside the `images-app` file, I'll assume that the root of the app is inside a folder called `/data` of course you will map that to your own server structure.

```
server {
    server_name localhost;
    root /data;
    index index.html;
    location / {
        try_files $uri =404;
    }
}
```

- now we go to `sites-enabled` and enable this site we created inside `sites-available`

```
sudo ln -s /etc/nginx/sites-available/images-app /etc/nginx/sites-enabled/
```

- make sure that all the nginx config are correct

```
sudo nginx -t
```

- If nothing is wrong we can go ahead and reload nginx settings

```
sudo service nginx reload
```

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edited Sep 23, 2013 at 9:24

answered Sep 23, 2013 at 9:15



Mohammad AbuShady

43k ● 11 ● 81 ● 89

- 1 This is very detailed and instructive. I had to delete my virtual machine due to disk error. I am now re-installing it and will try it when installation is done. Thank you very much – [iso_9001_](#) Sep 23, 2013 at 9:22
- 2 I have just had the chance to try this out and it worked like a charm. Thank you for the detailed answer and your time – [iso_9001_](#) Sep 23, 2013 at 12:50

or just modify this `default` file already having half of the instruction to set up your own server.

– [vdegenne](#) Dec 5, 2022 at 15:14



For my case I just edited `/etc/nginx/sites-enabled/default` file.

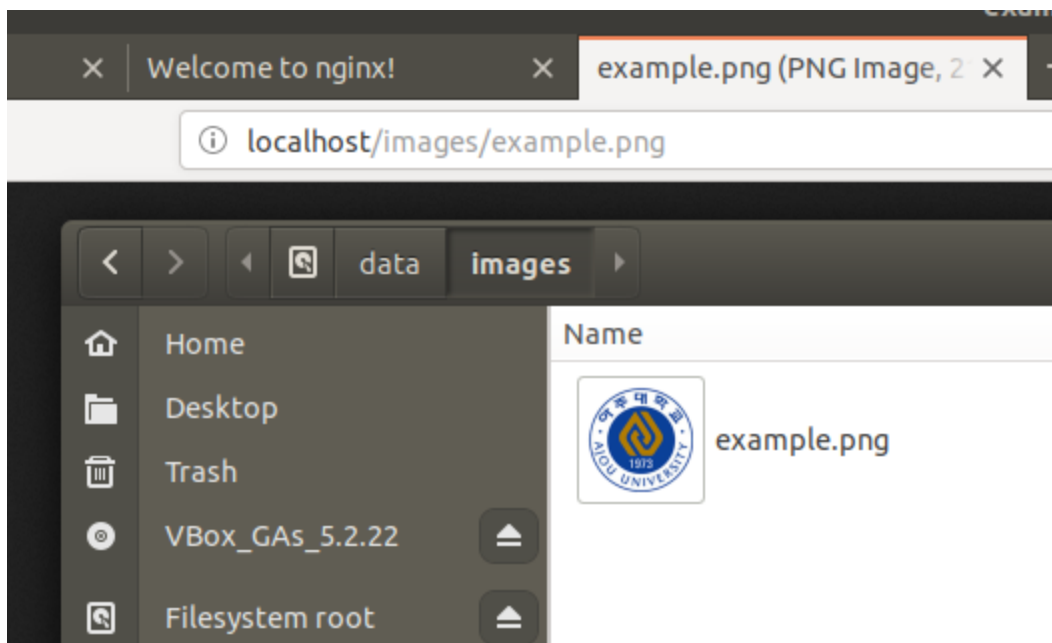
11

I added following config:

```
location /images/ {  
    root /data;  
}
```

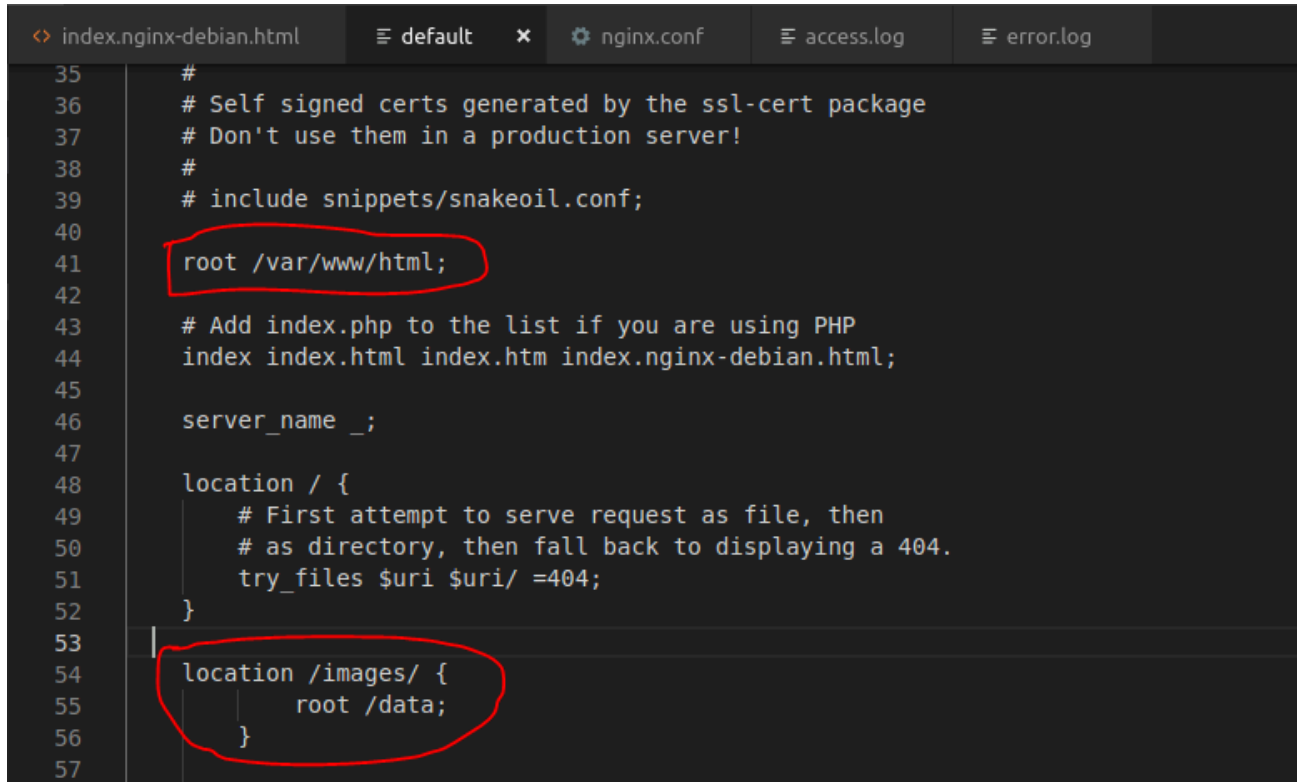


and placed images under `/data/images`:



and url works: <http://localhost/images/example.png>

I use VS Code as SuperUser. (I know it is bad, but I accept risks) It helps a lot with root access file editing:



```
35 #
36 # Self signed certs generated by the ssl-cert package
37 # Don't use them in a production server!
38 #
39 # include snippets/snakeoil.conf;
40
41 root /var/www/html;
42
43 # Add index.php to the list if you are using PHP
44 index index.html index.htm index.nginx-debian.html;
45
46 server_name _;
47
48 location / {
49     # First attempt to serve request as file, then
50     # as directory, then fall back to displaying a 404.
51     try_files $uri $uri/ =404;
52 }
53
54 location /images/ {
55     root /data;
56 }
57
```

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answered Dec 16, 2018 at 3:33



Teoman shipahi

23.2k ● 16 ● 144 ● 173

can i create image hosting service with nginx? and custom domain ? – Rohan Devaki Feb 18, 2022 at 15:21



6



I'm also new to nginx, Here is my solution that is similar with Mohammad AbuShady's answer :

- delete `sites-enabled/default`
- create the `whatever.conf` in `/etc/nginx/conf.d/`

The reason is:

`sites-enabled/default` has defined a server

that is listening on 80 routing with `/var/www/html`

```
server {
    listen 80 default_server;
    listen [::]:80 default_server;

    root /var/www/html;
```

```
location / {  
    # First attempt to serve request as file, then  
    # as directory, then fall back to displaying a 404.  
    try_files $uri $uri/ =404;  
}
```

the `nginx.conf` file includes other conf files

```
include /etc/nginx/conf.d/*.conf;  
include /etc/nginx/sites-enabled/*;
```

pay attention on permission

the 1st edition of my.conf is root on /home/myusername/, but will get 403 Forbidden error, check the error.log:

```
2016/04/07 20:12:44 [error] 12466#0: *2 open() "/home/myusername/data/a" failed (13:  
Permission denied),  
client: 127.0.0.1, server: , request: "GET /a HTTP/1.1", host: "localhost"
```

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edited Jun 13, 2023 at 3:21

answered Apr 7, 2016 at 12:49



SCOZV

211 ● 2 ● 4

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