Nginx sites-enabled, sites-available: Cannot create soft-link between config files in Ubuntu 12.04

Asked 11 years, 7 months ago   Modified 9 months ago   Viewed 306k times

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I am trying to create soft links between config files containing server blocks in the sites-enabled and sites-available directories in /etc/nginx/.

The command I am using is:

```
sudo ln -s sites-available/foo.conf sites-enabled/
```

When I then execute:

```
ls -l
```

The result is:

```
lrwxrwxrwx 1 parallels parallels 27 Aug  6 20:44 immigrationinformation.conf ->
immigrationinformation.conf
```

where the `immigrationinformation.conf -> immigrationinformation.conf` part has a charcoal with red typeface.

When I then try and access this soft-link, I am told that it is broken.

When I create the soft-link in the sites-available directory i.e.

```
sudo ln -s sites-available/foo.conf sites-available/foo_link.conf
```

it works as normal. However, if I then move this to the sites-enabled directory, the link is broken again.

I can create the soft link via the file manager GUI but not via the command line. I can also create hard-links with no problem.

I suspected it was a permissions issue so I have played around with setting all permissions to 777 of both directories and the directories themselves and also changing the owners to something other than root, but still with no luck.

Any help would me much appreciated, thank you.

ubuntu   symlink   hardlink

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2   I know the question is already answered but i wanted to point where your mistake was, it was actually very simple, you needed to specify the file name in the second argument not the first `sudo ln -s sites-available/ sites-enabled/foo.conf` while standing inside the `/etc/nginx` directory
– Mohammad AbuShady Aug 12, 2013 at 9:11

5 Answers

Sorted by: Highest score (default) ⬍

You should start by understanding the target of a *symlink* is a *pathname*. It can be **absolute** or **relative** to the directory which contains the symlink.

244

Assuming you have `foo.conf` in */sites-available*:

```
cd sites-enabled
sudo ln -s ../sites-available/foo.conf .
ls -l
```

Now, you will have a symlink in */sites-enabled* called `foo.conf` which has a target *../sites-available/foo.conf*.

Just to be clear, the normal configuration for Apache is for potential sites to live in */sites-available* and the symlinks for the enabled sites to live in */sites-enabled*, pointing at targets in sites-available.

That doesn't seem to be the case based on the way you described your setup; however that is not your primary problem.

If you want a symlink to **ALWAYS** point at the same file, regardless of the where the symlink is located, then the target should be the full path; ie:

```
ln -s /etc/apache2/sites-available/foo.conf mysimlink-whatever.conf
```

Here is (line 1 of) the output of my `ls -l /etc/apache2/sites-enabled`:

```
lrwxrwxrwx 1 root root  26 Jun 24 21:06 000-default -> ../sites-available/default
```

See how the target of the symlink is relative to the directory that contains the symlink (it starts with ".." meaning go up one directory).

Hardlinks are totally different because the target of a hardlink is not a directory entry but a filing system Inode.

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edited Oct 11, 2023 at 19:25
NOCARRIER
2,633 ● 5 ● 42 ● 62

answered Aug 6, 2013 at 20:54
Rodney
3,061 ● 1 ● 15 ● 16

Ok I see my problem now, I thought the `ln` command would be resolving the path for me, however I now see that I just need to specify the full path of the target, or the relative path from the location on the symlink. – iamyojimbo Aug 6, 2013 at 22:34

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My site configuration file is **example.conf** in **sites-available** folder So you can create a symbolic link as

```
ln -s /etc/nginx/sites-available/example.conf /etc/nginx/sites-enabled/
```
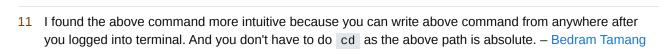
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answered Jun 29, 2020 at 7:01
Bedram Tamang
4,424 ● 35 ● 28

11 I found the above command more intuitive because you can write above command from anywhere after you logged into terminal. And you don't have to do `cd` as the above path is absolute. – Bedram Tamang Jun 29, 2020 at 17:41 ✎

You can still use a relative path for the target without having to `cd` eg `ln -s ../sites-available/example.conf /etc/nginx/sites-enabled/` as when the symlink is resolved it neither knows nor cares where `ln` was run from. (`ln` could even be run on a different machine then the symlink copied in). The relative path (for the target) has the advantage that it remains valid if the root of the installation is moved, or is viewed from a different perspective such as inside a container vs on the container host, or inside vs outside of a `chroot` – Rodney Jul 2, 2022 at 7:05

@Rodney my point is you need to resolve the symbolic link by yourself if you are using the relative path. sometimes `../sites-available/example.conf` path is valid, sometimes you need to do `../../sites-available/example.conf` and so on, the absolute path can be executed from anywhere, no require to resolve the path by yourself. – Bedram Tamang Jul 3, 2022 at 10:41 ✎

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In my case, I have multiple sites in site-available folder. All sites symbolic links are created with a single command:

```
ln -sf /etc/nginx/sites-available/* /etc/nginx/sites-enabled/
```

Then test and update nginx

```
# For testing nginx config
sudo nginx -t

# For updating nginx config
sudo nginx -s reload
```

Share Improve this answer Follow   edited Jun 5, 2024 at 10:55   answered Nov 16, 2023 at 18:59

M. Hamza Rajput
10.3k ● 3 ● 51 ● 41

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You can overwrite the existing file ../sites-enabled/myproject by forcing ln like this

```
sudo ln -sf ../sites-available/myproject ../sites-enabled/
```

then

```
sudo service nginx restart
```

Share Improve this answer Follow   answered Jun 17, 2021 at 10:53

Atif Tariq
2,772 ● 1 ● 30 ● 35

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To shorten manual typing of each conf file, you can try from sites-enabled folder:

```
ln -s ../sites-available/*.conf .
sudo systemctl restart nginx
```

Share Improve this answer Follow   answered Oct 26, 2021 at 5:05

embarker
194 ● 1 ● 6

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