

How to use nginx on Travis (or other) CI system

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Travis Ci is one of the most essential tools for my projects, since it takes a burden of maintaining Jenkins away of me. I try to use Travis automation for every boring activity, and having it run after each source code change to do some basic tests saves me a lot of time.

Making things work in Travis is typically straightforward, but there are cases where a special configuration needs to be applied, since the new Travis is based on the container-based architecture. This poses some requirements: no `root` access and no `sudo` functionality for your setup scripts. Some software doesn't like that.

My website's repo is an example where I needed to use `nginx` for some local testing. For some reason `nginx`, instead of just using `/var/tmp`, tries to create its temporary files in `/var/run` directory, and we don't have the permission to this directory in a container. So I changed these paths to use `/tmp` together with `access_log` and `error_log` paths; website content lives in `/tmp/www`.

Even with these changes, I haven't managed to achieve warning-free start. As non-zero UID, it seems like `nginx` never cleanly starts:

```
nginx: [alert] could not open error log file: open() "/var/log/nginx/error.log" failed (13: Permission denied)
```

(Its `-p` flag to change a prefix sounded promising, but it seemed to have no effect on any of the paths which caused me problems)

nginx installation

On the old Travis infrastructure one could use `apt-get` run as a part of `script:` directive, but the container-based Travis requires following lines in `.travis.yml` to install `nginx` package:

```
addons: apt: packages: - nginx
```

nginx config

```
worker_processes 10;
pid /tmp/nginx.pid;

error_log /tmp/error.log;

events {
    worker_connections 768;
}

http {
    client_body_temp_path /tmp/nginx_client_body;
    fastcgi_temp_path    /tmp/nginx_fastcgi_temp;
    proxy_temp_path      /tmp/nginx_proxy_temp;
    scgi_temp_path       /tmp/nginx_scgi_temp;
    uwsgi_temp_path      /tmp/nginx_uwsgi_temp;

    server {
        listen 8888 default_server;

        root /tmp/www;
        index index.html index.htm;

        server_name localhost;
        location / {
            try_files $uri $uri/ =404;
            autoindex on;
        }
        error_log /tmp/error.log;
        access_log /tmp/access.log;
    }
}
```

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Starting/stopping nginx

To start:

```
nginx -c /etc/nginx.conf
```

To stop:

```
nginx -c /etc/nginx.conf -s stop
```

References

I use a block of `_temp_path` directives from this very useful repository:
<https://github.com/exratione/non-root-nginx>