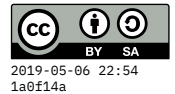


Project 7: Configure web server



For this project, you should configure your virtual private server (from Check-in 11) to deploy a static web site.

- It should support SSL/TLS (accessible over `https`), and the plain unencrypted site (at `http`) should redirect to the encrypted version.
- You should implement a workflow for conveniently updating the site's content via `git` – this could be by logging into the server and doing `git pull`, or setting up a repository on your server with a `git hook` so you can instead do `git push` from a development machine.

Hint: code to add to your `VirtualHost` block to force redirect (change `HOST` to your host name):

```
RewriteEngine on
RewriteCond %{SERVER_NAME} =HOST.liucs.net
RewriteRule ^ https://%{SERVER_NAME}%{REQUEST_URI} [END,NE,R=permanent]
```

Hint: here are rough instructions for a `git push` workflow to your server. On the server, first go to your host's folder in the Apache `www` folder, and then create a *bare* git repository beside it:

```
cd /var/www/HOST.liucs.net
mkdir html.git
cd html.git
git init --bare
```

Create a “post-receive” hook script, as follows:

```
touch hooks/post-receive
chmod +x hooks/post-receive
nano hooks/post-receive
```

Now you will be in the editor for your script. Enter and save the following code:

```
#!/bin/sh
export GIT_WORK_TREE=/var/www/HOST.liucs.net/html
git clean -fd
git checkout -f
```

Your repository is currently empty, so commit the existing `html` directory to it:

```
git --work-tree=./html add .
git --work-tree=./html commit -m "Initial commit"
```

Your workflow is now steps away! Clone the server's repository into your **local** development environment like this:

```
git clone root@HOST.liucs.net:/var/www/HOST.liucs.net/html.git
cd html
```

Now you can edit the files, and use add/stage/commit as normal. When you push back to `origin`, the files should “go live” on your server!

Be careful though – if you make any manual edits to the `html` directory on the server, those would be **overwritten** on the next push!