

Use Git to Update Web Site

Sam Clark

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1 Notes

- substitute your own [user] and [domain.net]

2 Reference links

- Secure no-password login
- Push local web repo to remote server
- Hook remote web repo to automatically update

3 No-password login

In your user's *root* directory on local machine

1. generate ssh key
 - `ssh-keygen -t rsa`
 - save in `./ssh/domain_net`
 - do not enter passphrase; i.e. hit enter twice
2. copy public key to domain.net:
 - `ssh-copy-id -i ./ssh/domain_net.pub user@domain.net`

In *root* directory on remote web server domain.net

1. verify key in `./ssh/authorized_keys`
2. ensure key is available
 - `chmod 700 .ssh`
 - `chmod 600 ./ssh/authorized_keys`

In your user's *root* directory on local machine

1. add key to local ssh client
 - start ssh-agent with: `eval ssh-agent`
 - `ssh-add ./ssh/domain_net`
2. confirm added
 - `ssh-add -l`
3. confirm fingerprint matches
 - `ssh-keygen -l -f ./ssh/domain_net.pub`
4. **confirm no-password ssh login**
 - this should log onto remote server without password: `ssh user@domain.net`
 - if more than one key, you can specify key for domain.net using this syntax

- ssh -i .ssh/domain_net user@domain.net
- can verify which key being used
- ssh -v user@domain.net

To make this permanent, i.e. every time you login, in *root* user directory on local machine (this assumes macOS, not sure what Linux equivalent is)

1. open .ssh/config
2. insert these lines and save:


```
# _____
Host [nickname for your connection]
HostName [your host's real name or IP#, e.g. cnn.com]
User [your login name for the host]
IdentityFile [full path to root]/.ssh/[domain.net] (public key you generated)
# _____
```
3. close file
4. now you should be able to login with “ssh [nickname]” where ‘nickname’ is whatever you entered for HostName in your ssh config file

4 Setup git sync to web server domain.net

In *root* directory on remote web server domain.net

1. setup remote git repo
 - cd ~
 - mkdir domain.net.git
 - cd domain.net.git
 - git init –bare

In *web site* directory on local machine

1. setup local git repo
 - git init
 - git add .
 - git commit -m “first commit”
2. add domain.net to the list of remote repositories for git
 - git remote add domain_net ssh://user@domain.net/~/.domain.net.git
3. push the local repo to domain.net
 - git push -u domain_net main

In *root* directory on remote web server domain.net

1. check that repo is working correctly
2. edit domain.net.git/.git/HEAD
 - “ref: refs/heads/master” -> “ref: refs/heads/main”
3. clone the repo to see the contents
 - clone domain.net.git cloned.domain.net.git
 - ls cloned.domain.net.git/*
4. setup up post-receive hook on remote repo
 - cd domain.net.git
 - nano hooks/post-receive
 - insert these two lines and save:


```
#!/bin/sh
GIT_WORK_TREE=/home/dh_7gfp82/domain.net git checkout -f
```

- make the file executable: `chmod o+g+x hooks/post-receive`

5 Update domain.net

In *web site* directory on local machine

- `git add .`
- `git commit -a -m "commit message"`
- `git push -u domain_net main`