Configure Synology NAS as Git Server

Instructions for setting up a git server on a Synology NAS with Diskstation. Specifically, I am using a DS414 with DSM 5.0.

Set Up User and Folder

- Create user `gituser` via Diskstation interface (with File Station and WebDAV privilages)
- Add new shared folder called `git` (located at `/volume1/git`) with read/write access for `gituser` and `admin`. This folder will hold all the repos.
- Install Git Server package via Diskstation
- Open Git Server and allow `gituser` permissions
- Enable SSH access on Diskstation (Control Panel > Terminal & SNMP > Enable SSH Service)

Configure SSH Access

- create `~/.ssh` folder for gituser on server

```
ssh admin@diskstation.local
mkdir /volume1/homes/gituser/.ssh
```

- copy public rsa key from local computer to gituser account on server

```
scp ~/.ssh/id_rsa.pub admin@diskstation.local:/volume1/homes/gituser/.ssh
```

- connect via SSH as `root` and rename `id_rsa.pub` to `authorized_keys` on NAS (or append if already exists, `cat id_rsa.pub >> authorized_keys`)

```
ssh root@diskstation.local
mv /volume1/homes/gituser/.ssh/id_rsa.pub /volume1/homes/gituser/.ssh/autho
```

- change permissions while logged in as root

```
cd /volume1/homes/gituser/
chown -R gituser:users .ssh
chmod 700 .ssh
chmod 644 .ssh/authorized_keys
```

Set Up New Repo on NAS

- create bare repo as root

```
ssh root@diskstation.local
cd /volume1/git/
git --bare init <repo-name>.git
chown -R gituser:users <repo-name>.git
cd <repo-name>.git
git update-server-info
```

NOTE: I'm not entirely sure if `git update-server-info` must be run for each repo or just initially. It seems to work without running this command, but I'm suspicious that it might cause problems later.

Add NAS as Remote for Local Repo

- Clone repo from NAS

```
git clone ssh://gituser@diskstation.local/volume1/git/<repo-name>.git
```

References

http://blog.osdev.org/git/2014/02/13/using-git-on-a-synology-nas.html
http://stackoverflow.com/questions/20074692/set-up-git-on-a-nas-with-

synologys-official-package http://www.heidilux.com/2014/02/setup-git-server-synology-nas/