Configure and Setup rsync environment for a QNAP to a WD My Cloud
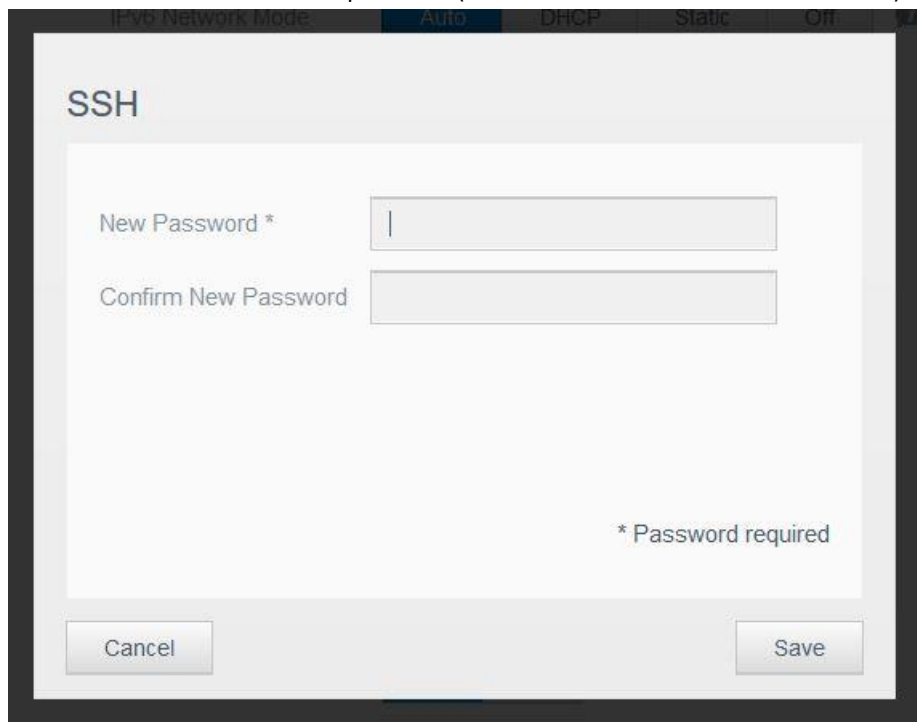
Software tools and WD My Cloud settings:

- SSH command line access enabled
- "Remote Server" feature enabled
- port forwarding enabled on My Cloud and router
  if external WAN side access needed
- SSH software tool
  Putty for Windows, http://www.putty.org/
  iTerm2 for Mac, http://www.iterm2.com/

Preparation work on Western Digital My Cloud

All settings are available in the Web UI -> Settings -> Network.
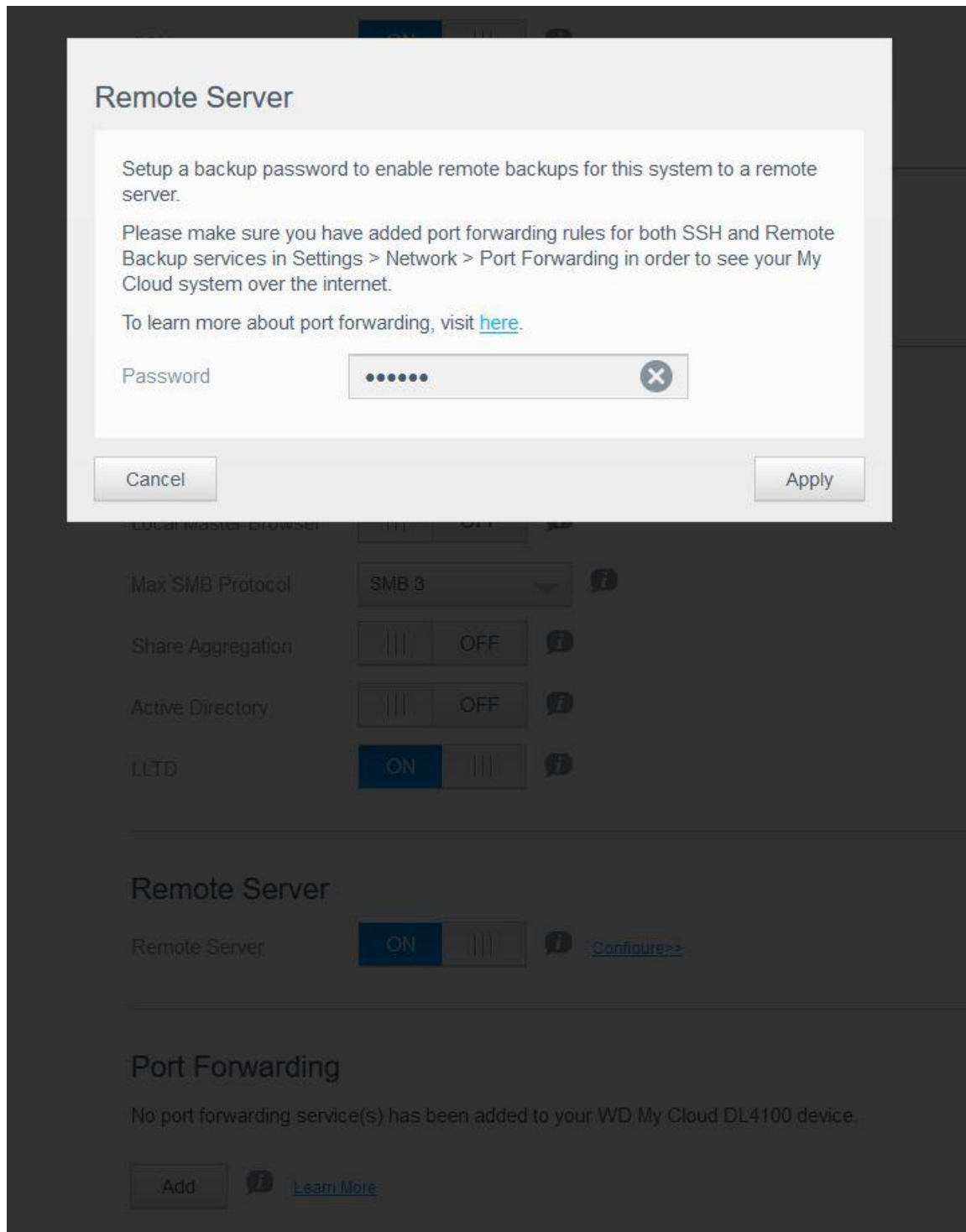Enable SSH service and enter a password (used later for SSH command line access).


Picture 1: dialogue for SSH password

Enable "Remote Server" and enter a password.

**Picture 2: Password for Remote Server**

If the WD My Cloud NAS shall be available from WAN side, "Port Forwarding" is needed. Click "Add" and select default services, enable "Remote Backups" and change the external port on the right side to any port number you like. Remember to configure Dynamic DNS and Port Forwarding rule for Internal port 873 on your router.
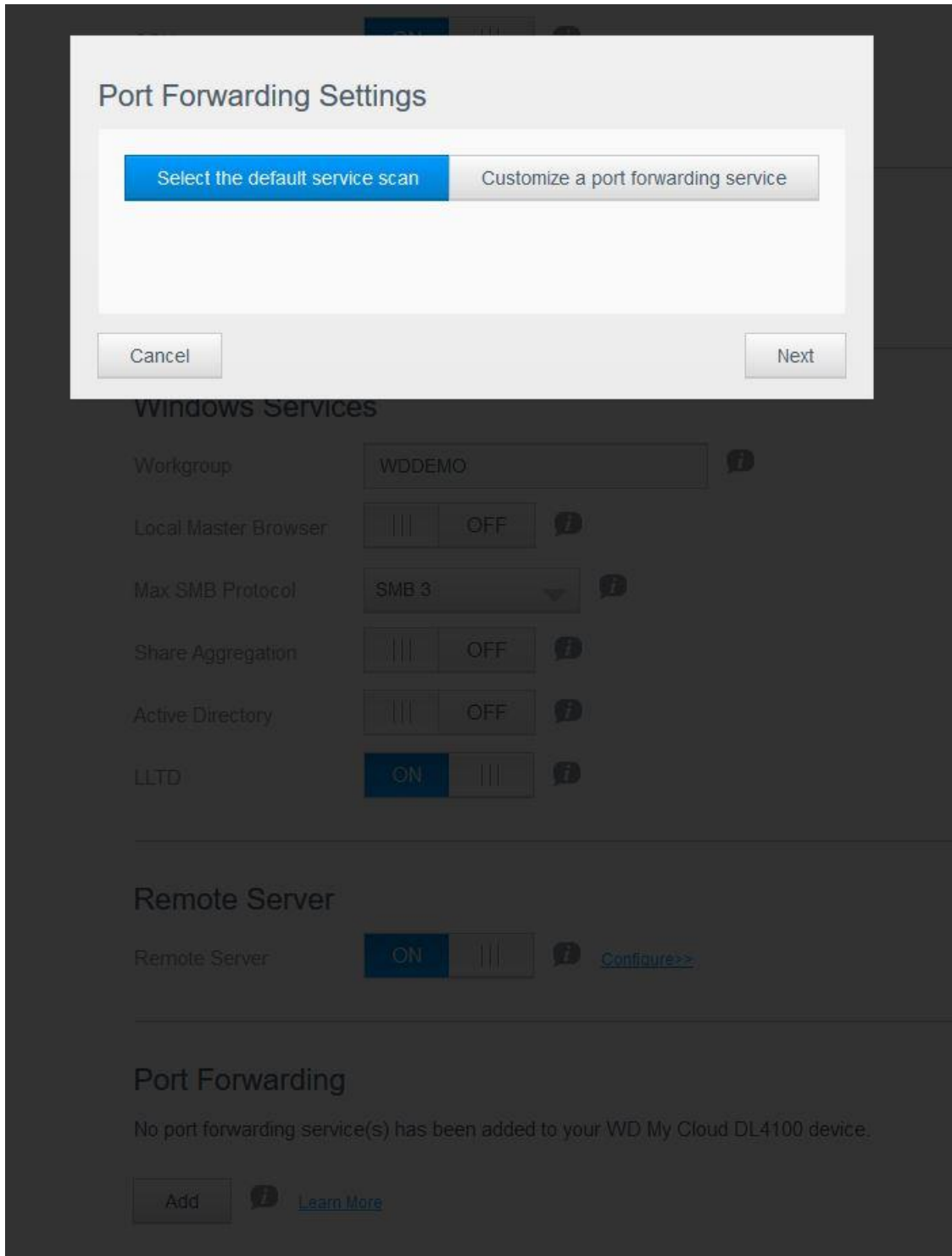
Picture 3: Dialogue 1 for Port Forwarding rules
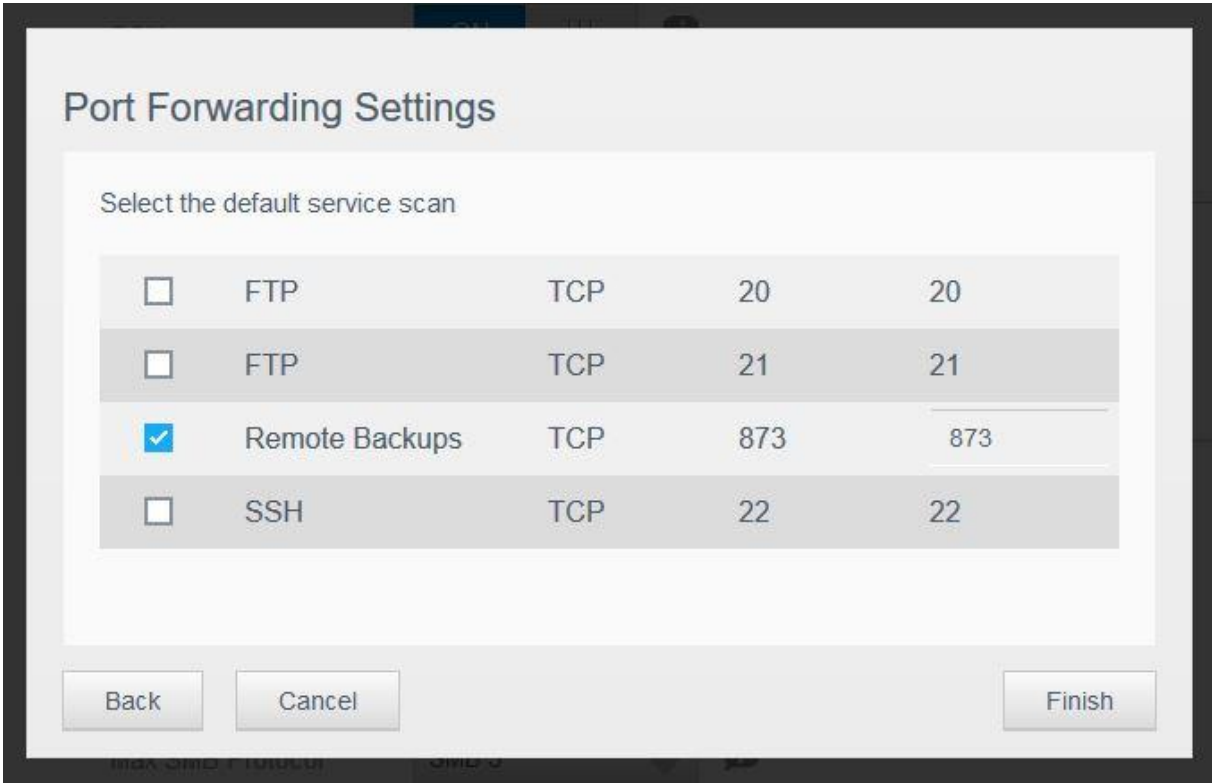
Picture 4: Dialogue 2 for Port Forwarding Rules
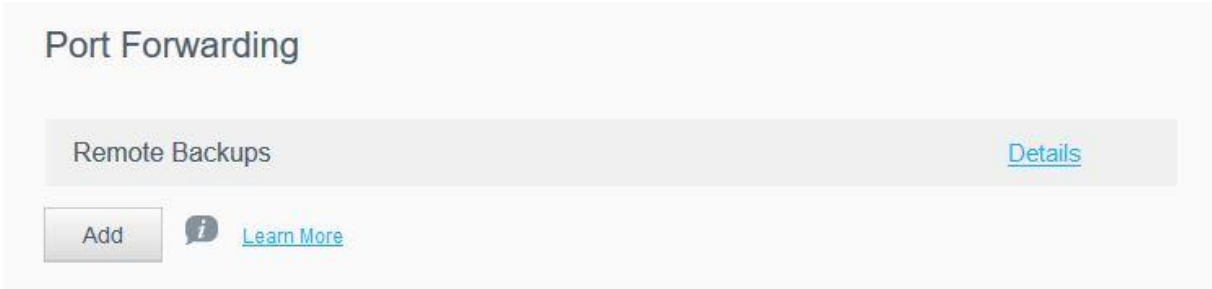
Picture 5: Port Forwarding rule for Rsync enabled

Start the SSH command line tool and login with username root and SSH-related password.

First, create a file named rsyncd.secrets in folder /etc. Type
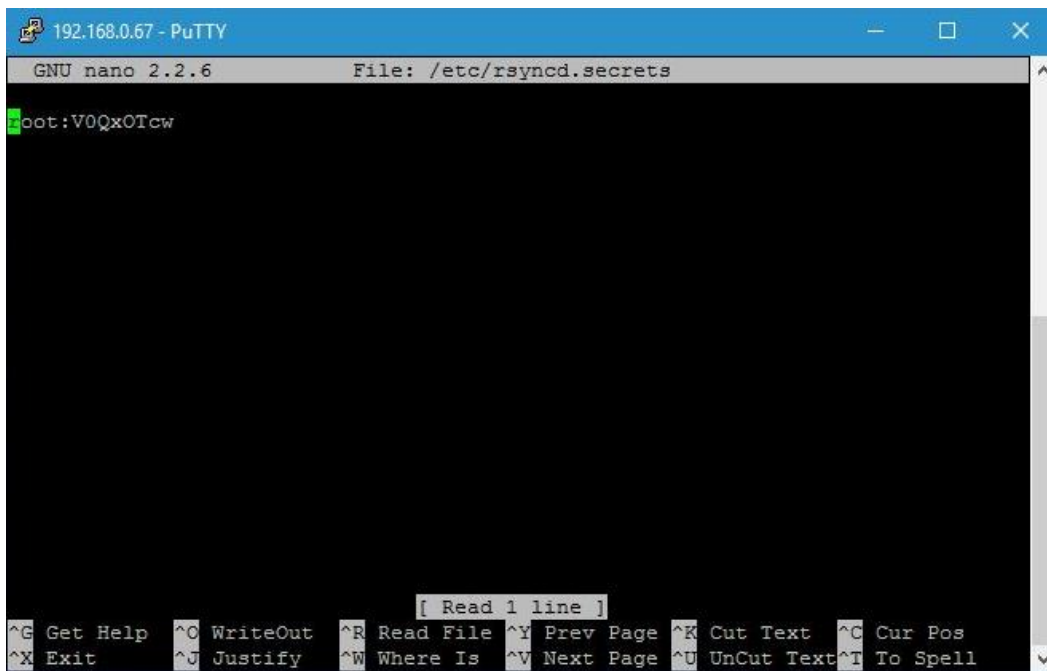
```
nano /etc/rsyncd.secrets
```

, then press SHIFT+O (capital o, not Zero 0) to write the file and press SHIFT+X to exit the Nano Editor. Next step is to set the correct file permission 600 (only root has access to this file). Type

```
chmod 600 /etc/rsyncd.secrets
```

to set this special file permissions correct, otherwise Rsync will not start. Now reboot the My Cloud device from within the Web UI. The reboot will cut off the SSH session. Reestablish the SSH connection in Putty or iTerm2 and again login with SSH credentials. The former empty file rsyncd.secrets has now one line in it, the login credential for the root user but with hashed password. Rsync is using plain text password, therefore we need to know the hashed password. Type again

```
nano /etc/rsyncd.secrets
```

to open the file but this time, don't do anything. Take a look into it and write down the password after the " : " In my example, the screen output is shown below. The example password for user root is V0QxOTcw. We will use this later. Write down the password and take care about capital O and 0.
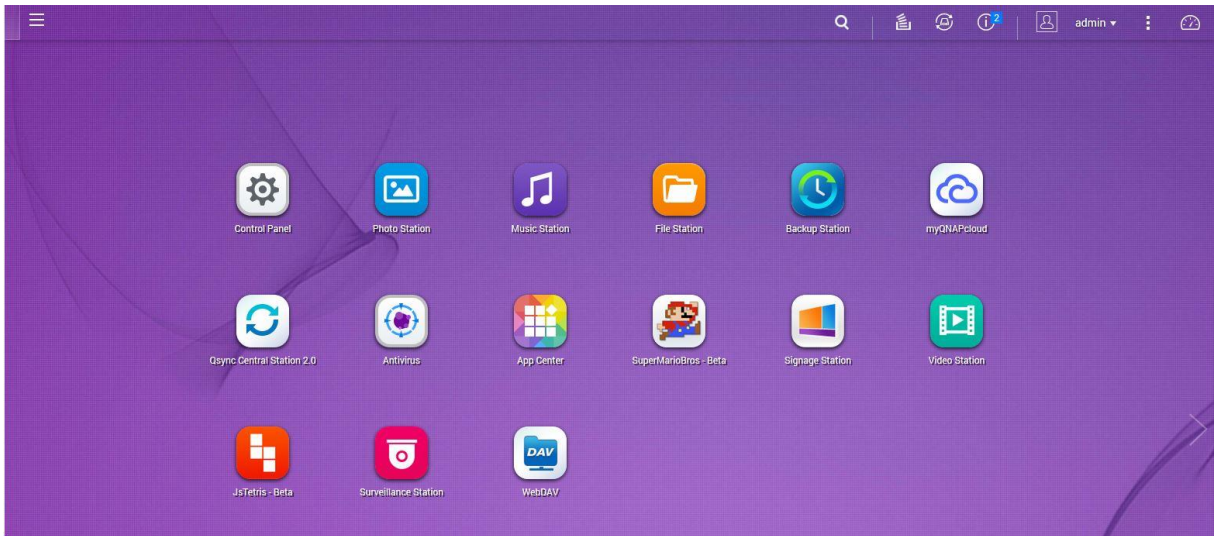

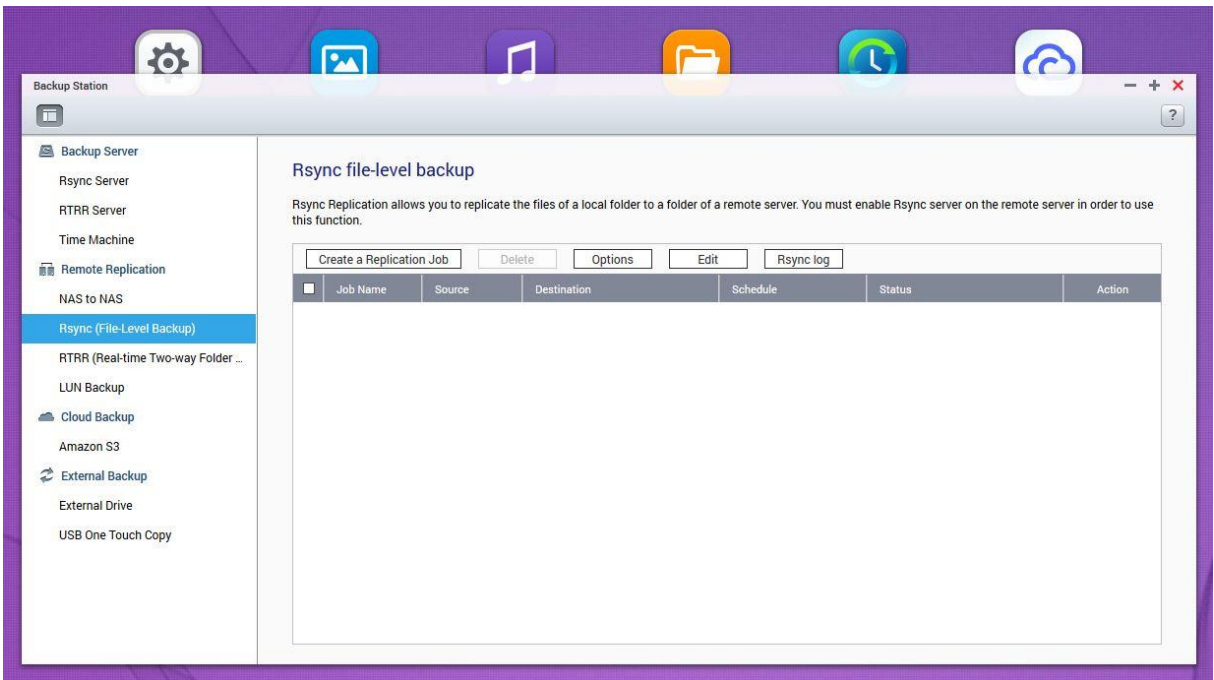**Picture 6: example of /etc/rsyncd.secrets**

Close the file is done by pressing SHIFT+X.

Rsync to My Cloud from a QNAP

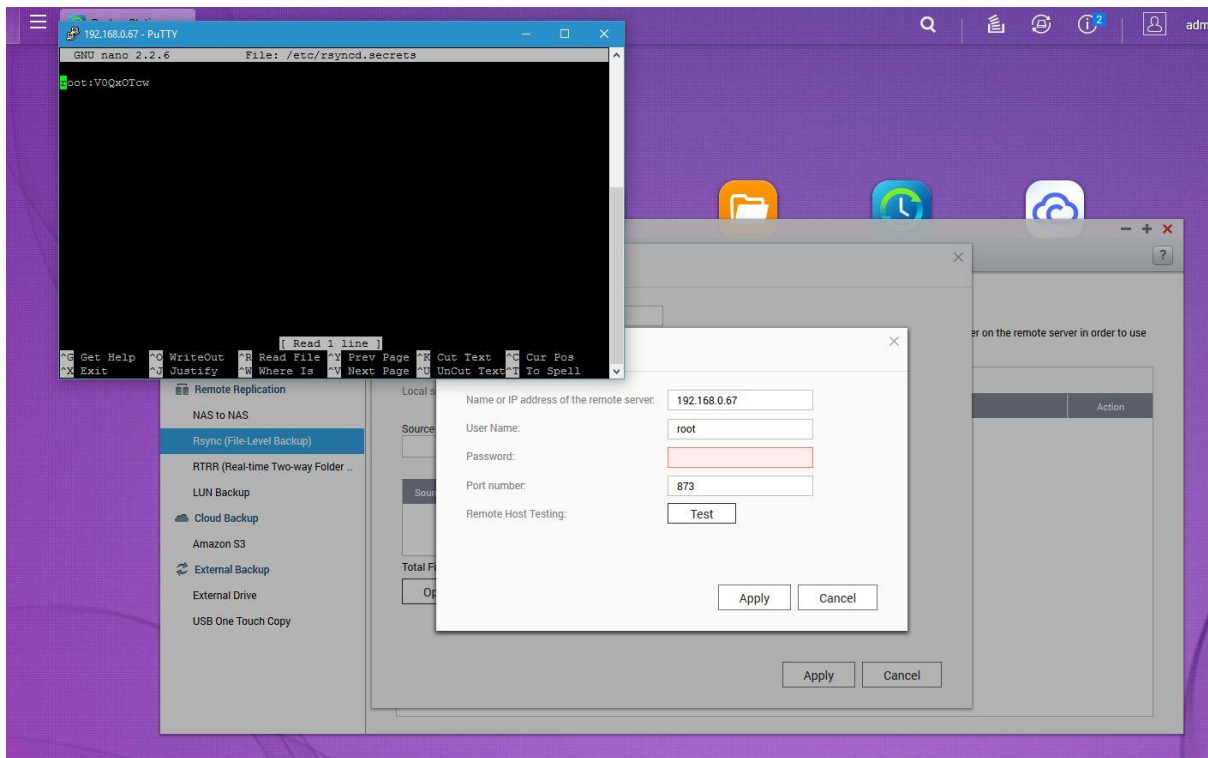**Picture 7: QNAP Backup Station**
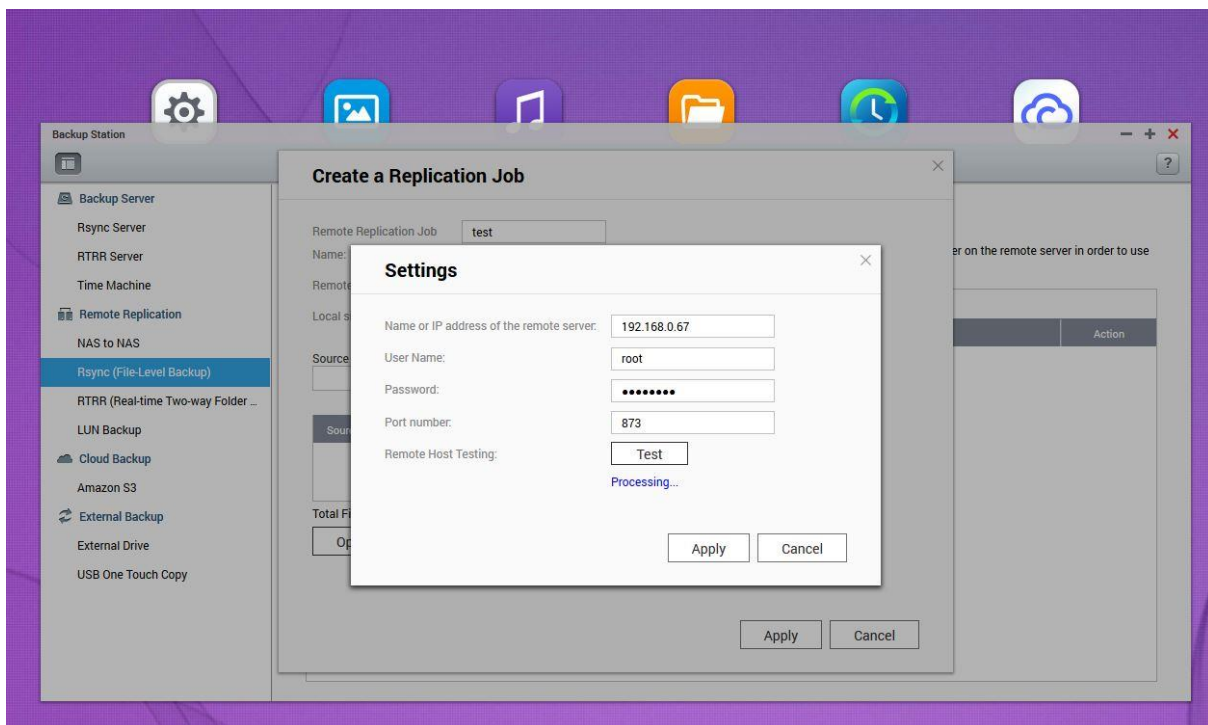
Backup Station is the Rsync tool to use.

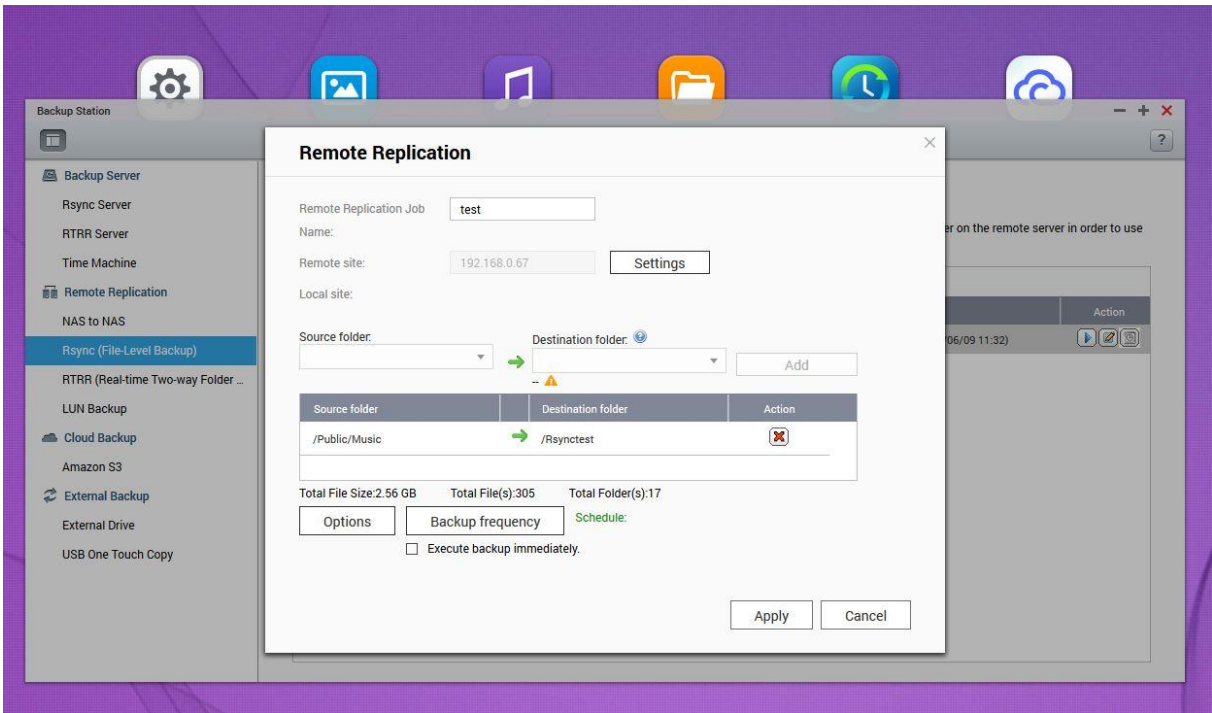**Picture 8: Remote Replication with Rsync**
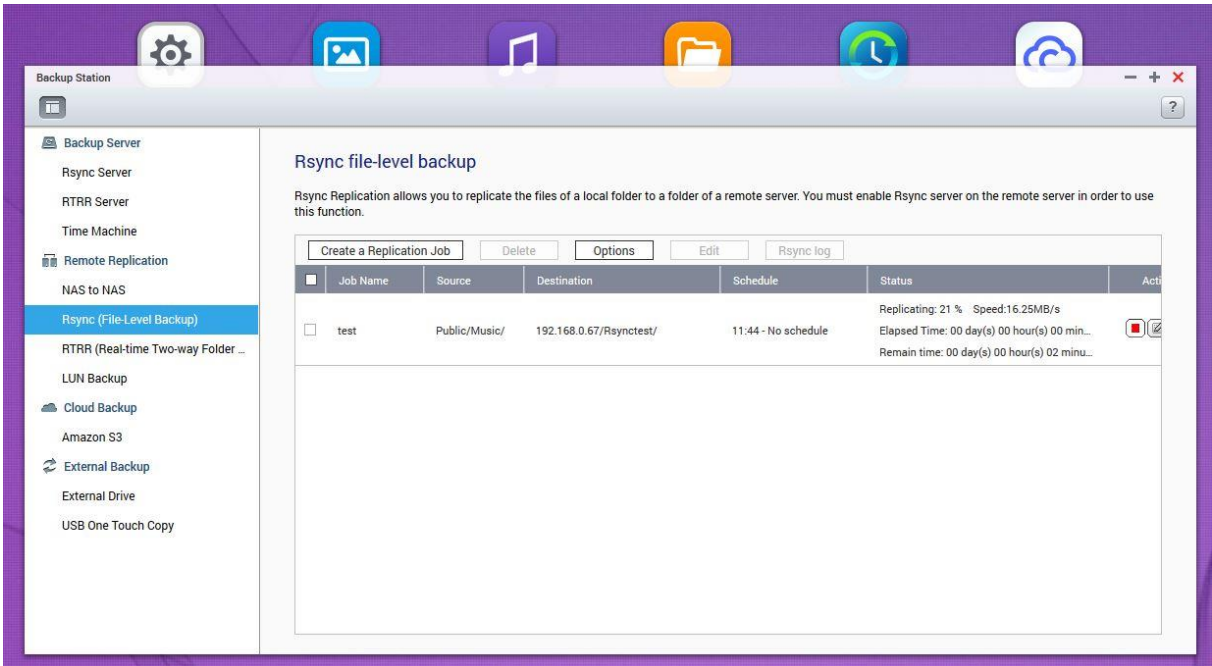
Picture 9: Credentials for Rsync

Remember to use the plain text password as shown in /etc/rsyncd.secrets, as described above.
Don't use the password for the "Remote Server", entered in the My Cloud web interface.

Picture 10: test successful with the plain text password

Picture 11: example folder structure for Rsync

Picture 12: Rsync job in action

Status shows some job details like speed. The shown speed is NOT the exact amount, the time proposals are useful.

RSYNC from a QNAP to a My Cloud successfully working!