Zero Touch Provisioning (ZTP) through DHCP

You can provide image path, license file and base configuration to an Agema switch via DHCP server for ZTP. Here are the steps to accomplish that through open source software:

1- Install Ubuntu on your server: https://help.ubuntu.com/community/Installation/FromUSBStick
2- Configure eth0 and ip addresses for basic networking via Ubuntu Gui or ifconfig. Gui is easiest but CLI is also possible: https://help.ubuntu.com/community/NetworkConfigurationCommandLine/Automatic
3- Install vsftpd (if you plan to install to go through ftp) or Apache (if you plan to install through http) and configure the file path

   https://help.ubuntu.com/lts/serverguide/ftp-server.html

   https://help.ubuntu.com/lts/serverguide/httpd.html

4- Transfer the Network Operating System (NOS), license file and base configuration file to the server above
5- Install isc-dhcp-server and configure basic DHCP services.
6- Add ZTP options to /etc/dhcp/dhcpd.conf similar to following (note that red items need to match the path to the files in your system:

```
subnet 10.168.3.0 netmask 255.255.255.0 {

range 10.168.3.1 10.168.3.254;
    host Leaf_01_device {
        hardware ethernet xx:18:23:30:8d:00;
        fixed-address 10.168.3.10;
        option default-url "ftp://10.168.3.124/images/AG_8032-1.2.1.91-installer";
        option license-url "ftp://10.168.3.124/images/licenses/triallicense-001823308D00-
20161018-60D-T3.bin";
        option provision-url "ftp://10.168.3.124/images/configs/leaf-01.conf";
        }
    host Leaf_02_device {
        hardware ethernet xx:18:23:30:8f:e6;
        fixed-address 10.168.3.20;
        option default-url "ftp://10.168.3.124/images/AG_8032-1.2.1.91-installer";
        option license-url "ftp://10.168.3.124/images/licenses/triallicense-001823308FE0-
20161018-20161018-60D-T3.bin";
        option provision-url "ftp://10.168.3.124/images/configs/leaf-01.conf";
        }
}
```

7- Restart the DHCP server: *sudo service isc-dhcp-server restart*
8- Connect to serial console port of the router
9- Reboot – During boot press “Delete” when you are prompted and get into ONIE
10- From the ONIE menu, either select uninstall OS and boot. Or just select Boot