

Provisioning of RAK 7249 Gateway

RAK 7249 - Gateway Provisioning With Orbiwise Distribution

1. Login into the gateway using ssh

```
ssh root@192.168.101.69 # this ip should be replaced with the ip received by the router.
passwd:
```

2. Allow port 50011 in the firewall of the gateway

```
iptables -t filter -I OUTPUT -p tcp --dport 50011 -j ACCEPT

# Otherwise We can also stop firewall of gateway and then wget the OW FW as the firewall restart automatically after reboot so no concern of security

/etc/init.d/firewall stop
```

- 3.Go to /mnt/mmcblk0p1/

```
cd /mnt/mmcblk0p1/
```

- 4.Download the Package to /mnt/mmcblk0p1/ Directory via wget

Note : *Please use the provided link to download the OW FW*

```
wget http://34.195.120.32:50011/gwd_rak7289_AU_SAAS_full_install_v6.2.0-45_F0E6791F3DF7D8C0.tgz
```

OR

Note: *We can also download the FW in local machine and then copy FW from local system to the gateway in /mnt/data/app/ location*

- 5.Got to root directory

```
cd /
```

Note : *The file has to be extracted from the root directory, so make sure that the cd / command was correctly executed.*

- 6.Extact the Frimware

```
tar xzvf /mnt/mmcblk0p1/gwd_rak7289_AU_SAAS_full_install_v6.2.0-45_F0E6791F3DF7D8C0.tgz
```

- 7.Reboot

```
reboot
```

Here are the most common issues when trying to provision a gateway:

- 1) All require ports might not be opened

This happens that LAN connections (rare with cellular) are behind firewalls that block some ports and then prevent connection between the gateway and the network server. The following ports have to be open to ensure full functionality:

UDP: 1780, 1782, 1784, 1788

TCP: 1790, 50010, 50011

- 2) Firmware was not installed in the correct directory

The procedure of provisioning is most often based in three steps (download firmware package, extract tar file, reboot the gateway). The extract step has to be run from the root directory, otherwise the whole provisioning will fail, so the cd / is really important.

```
cd /
tar xzvf /xxx/yyy/gwd_zzz.tgz
```

- 3) Gateway certificates are not valid

This might happen that the gateway firmware package contains wrong certificates and then the gateway or the server would refuse the connection. Gateway and gateway-file-server certificates shall be double checked.