



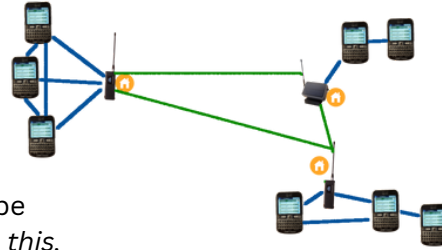
Onboarding a Node

What is a Cluster?

A group of **up to 90 fully trusted devices** that securely communicate using encryption, digital signatures, and frequency hopping.

What is Onboarding?

Adding a new trusted device to your cluster. This needs to be done one time for each device. *Only the root device can do this.*

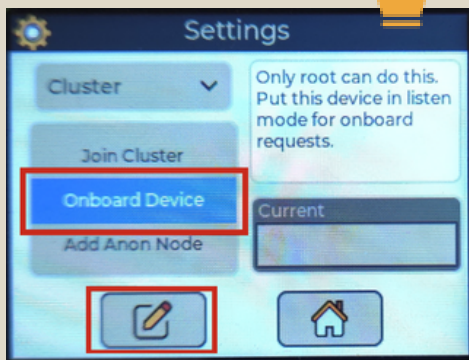


1. Ensure No Other Devices are Onboarding Nearby

If any other device is in Join Mode or Onboard Mode, interference may occur and the onboard may not be successful (or you may onboard the wrong device).

2. Put the Root device in Onboard Mode

Select *Settings / Cluster / Onboard Device*



3. Power On the new Node

It should already be in Join mode upon startup



The node screen should show that it's waiting to join. This looks different depending on your node type. A paper node is shown here.

If the node is from an existing cluster, you need to clear the contents of its SD card and restart it. If you're running from flash instead of SD, you'll need to re-install the firmware and choose to delete all data from the device.

3. Wait a Minute or Two

During onboarding, the devices are exchanging a lot of info so the new device can communicate securely with your cluster.



If it takes more than a few minutes and seems frozen, you can safely restart both devices and onboard again.

4. Allow Your Cluster to Stabilize

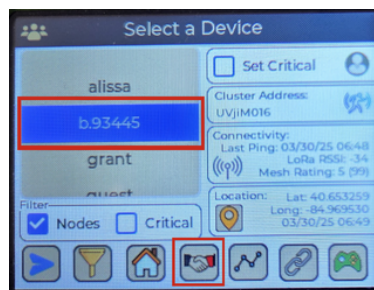
If your cluster has several or many existing devices, those existing devices will need to learn to trust the new device.



Other communicators may temporarily show the new devices as *Unidentified*. This means trust has not yet been established between the two devices. It should clear up automatically within minutes.

[Optional] Speed up Stabilization

You can cause other existing devices to trust the new node faster by selecting the new node on your "Devices" screen and touching the handshake/trust button several times over the course of several minutes.



Proximity Nodes



If your node is equipped with a proximity sensor, it may take several minutes for nearby devices to become aware of the fact that it is a proximity sensor instead of a basic node.

