

The purpose of the solution is to allow a web app to run commands on remote Raspberry Pis. Scripts are required to be reusable and enable the following over the internet:

- 1. Setup a new Raspberry Pi node with a secure reverse SSH tunnel(This may require a script written on the container side too)
  - Confirm correct temp password and vendor ID (web app call)
  - Request user to enter a node name
  - Check if name exists on webapp (web app call)
  - Receive available port (Web app call)
  - Set hostname
  - Create user as tunnel<port>
  - Generate an SSH keys
  - Provide that SSH keys to the SSH Container (probably via the web app)
  - Authorize keys
  - Setup AutoSSH so that if the tunnel fails (power failure, crash, etc) the tunnel is restarted.
  - Instantiating a persistent reverse SSH tunnel from port 22 to available container port
- 2. Confirm if a phone Bluetooth device name and identifier is in the vicinity of the Pi
  - Scan Bluetooth devices
  - Confirm name and ID
  - If present run a bash script called "open.sh", if not report failure