

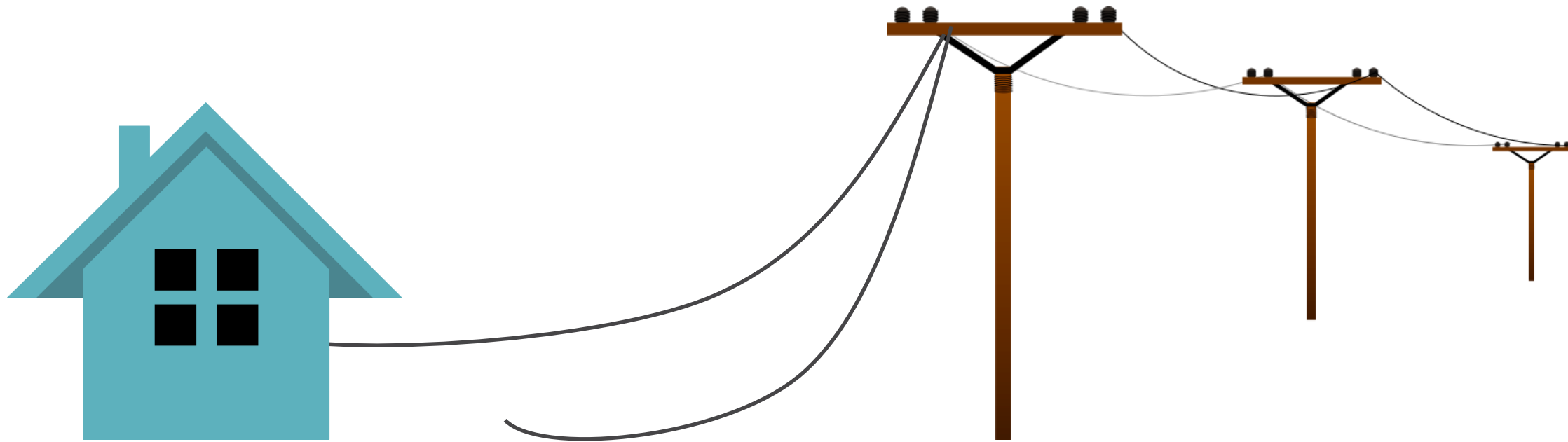
# Power Failures and Uninterruptable Power Supplies



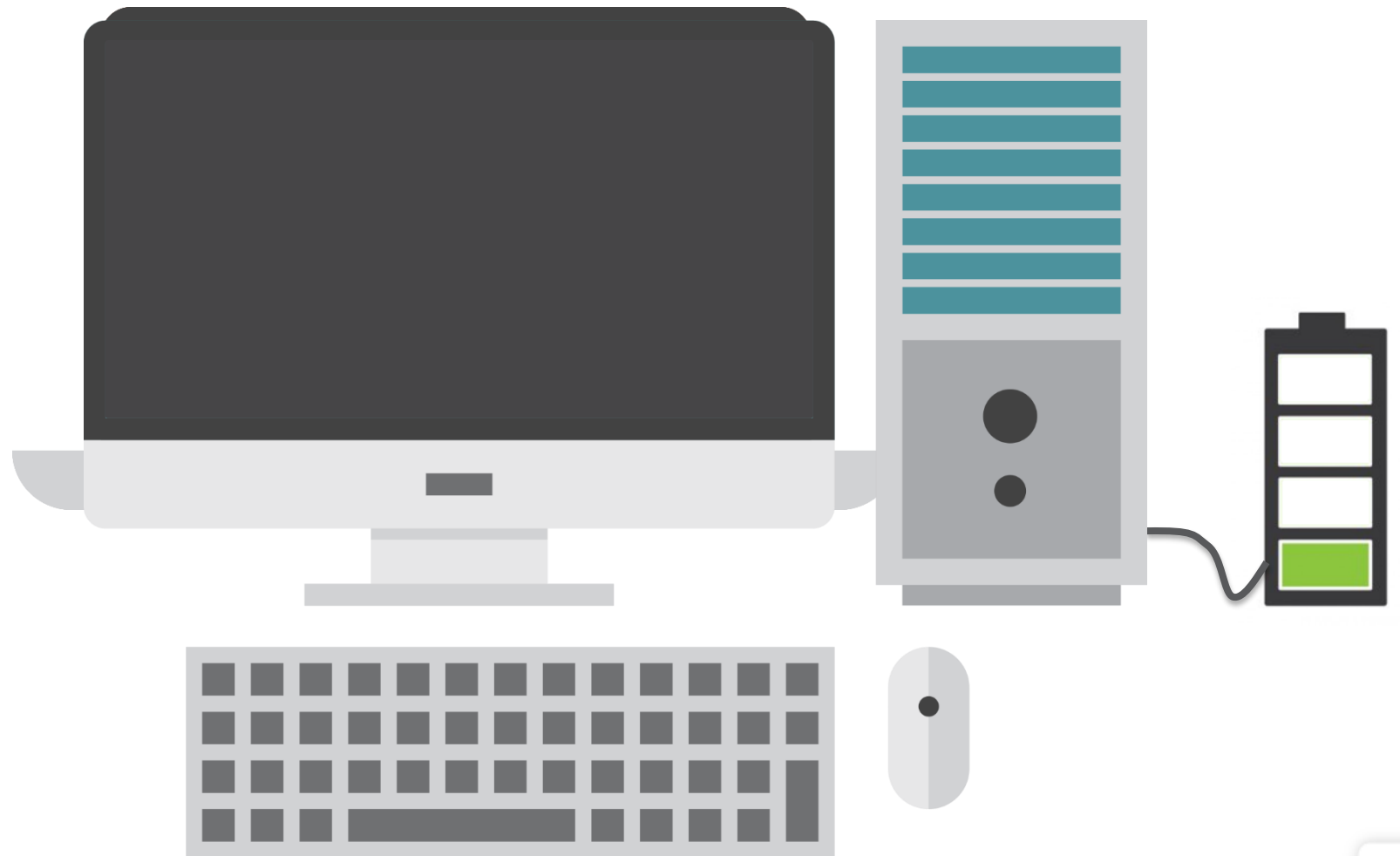
Mel Grubb

@melgrubb | [melgrubb.wordpress.com](http://melgrubb.wordpress.com)

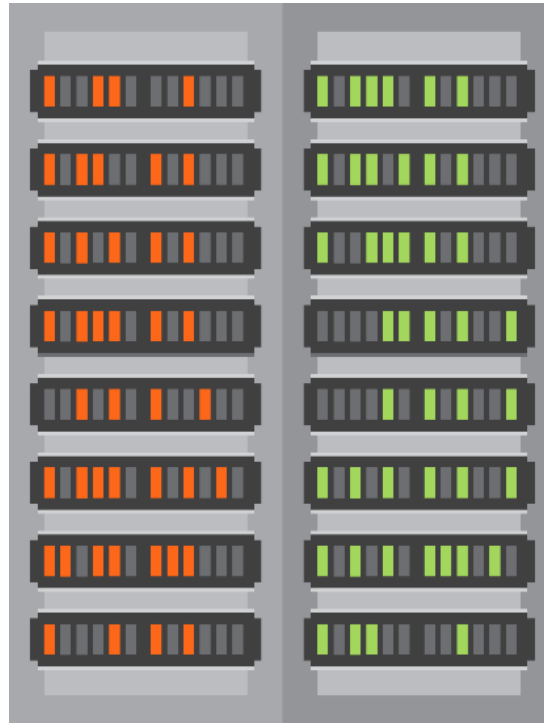
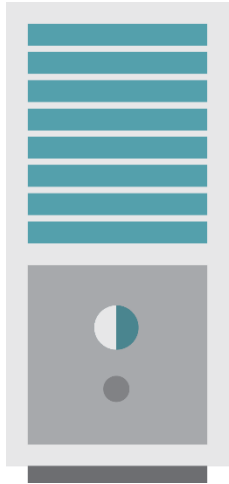
# Power Failures



# Battery Backup



# Network UPS Tools



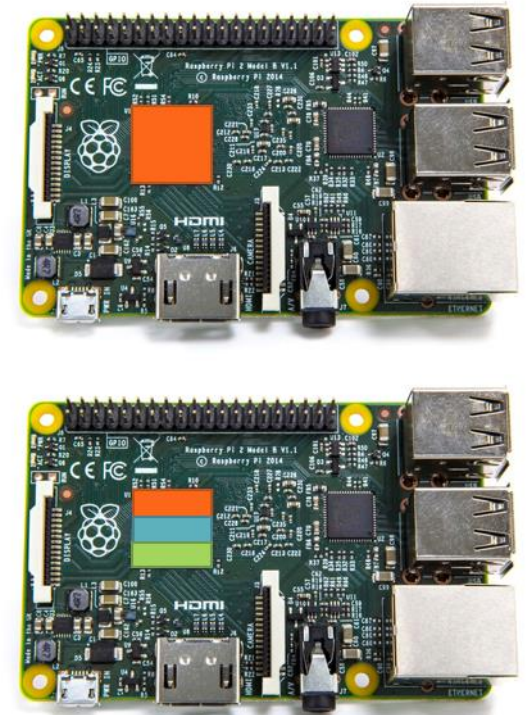
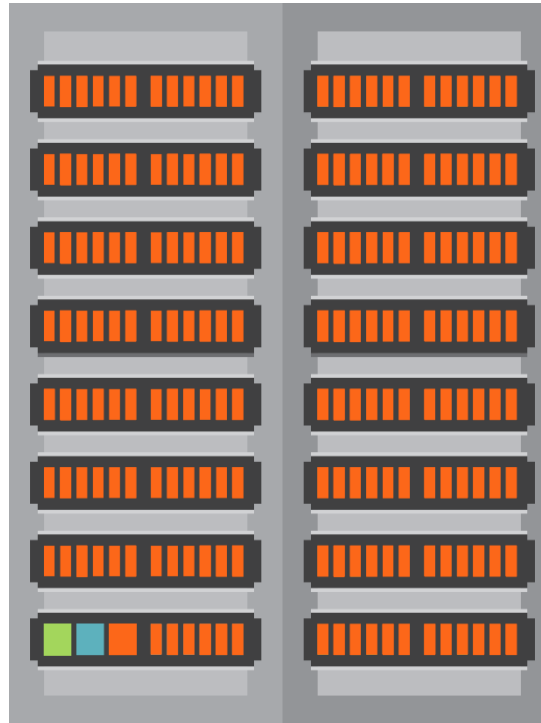
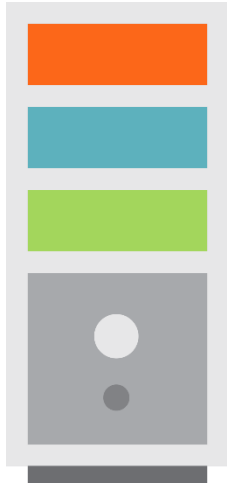
# Network UPS Tools

Client

Server

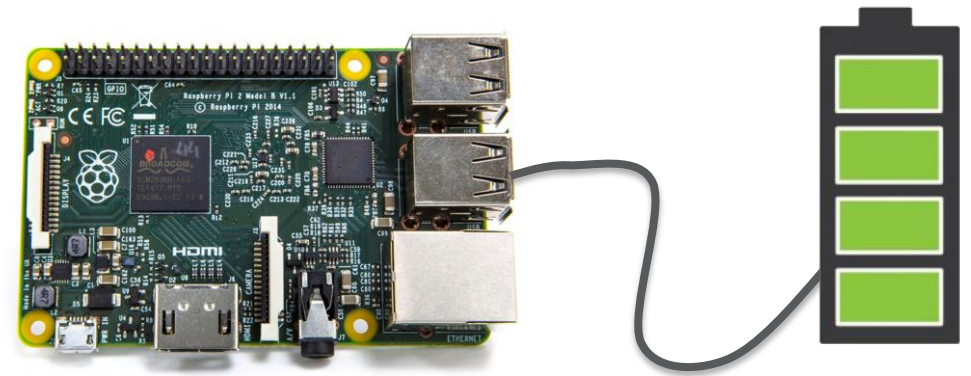
Driver

# Network UPS Tools



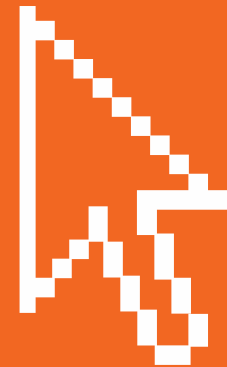
# Prerequisites

- Raspberry Pi Home Server
- Uninterruptable Power Supply
- USB cable



# Demo: Choosing A UPS

[www.networkupstools.org](http://www.networkupstools.org)





# Demo: Installing NUT

`Sudo apt-get install nut`



# Network UPS Tools

Client

Server

Driver



# Demo: Installing NUT Server Layer

Edit nut.conf



# Network UPS Tools

Client

Server

Driver



# Demo: Installing NUT Server Layer

Edit users file

Edit upsmon.conf



# Network UPS Tools

Client



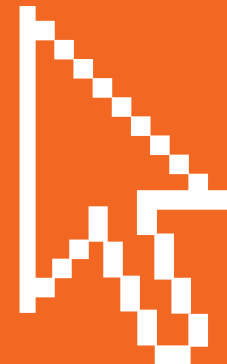
Server



Driver



# Demo: Testing the UPS



# Beyond the Basics: Email Notifications





# Demo: Email Notifications

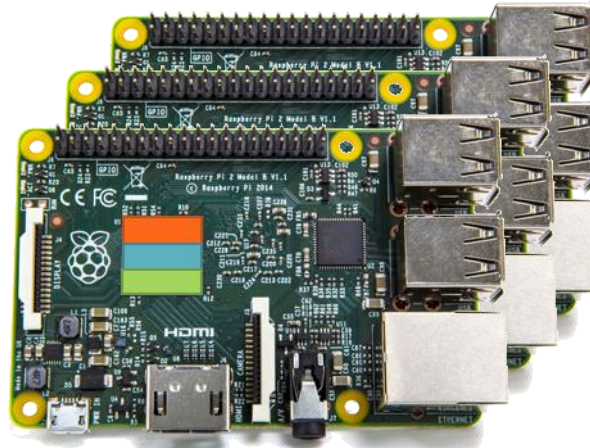
Install SSMTP

Create NUT script

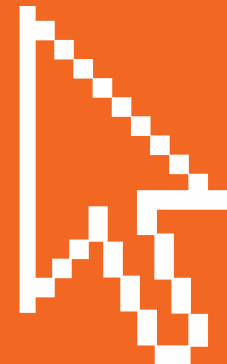
Configure NUT



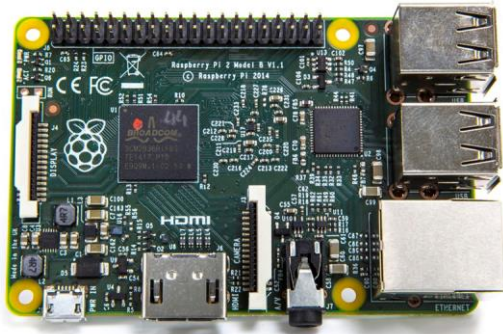
# Beyond the Basics: Multiple Raspberry Pis



# Demo: Multiple Raspberry Pis



# Summary



- Installed Network UPS Tools (NUT)
- Configured driver, server, and client layers
- Tested power-down behavior
- Added email notifications
- Added a second Raspberry Pi

# Make A Backup

Windows

Win32DiskImager

Mac / Linux

```
sudo dd if=/dev/diskn of=~/.pi.img bs=1m
```



# What's Next?

## WordPress