

# Use Raspberry Pi to Measure Broadband Speeds to Hold Your ISP Accountable

Hackerspace Charlotte  
David Waugh

# Install & Test Speedtest

```
sudo apt-get install python-pip
```

```
sudo pip install speedtest-cli
```

Open a terminal window

```
speedtest-cli
```

# Create a script to run speedtest

- In the terminal window, enter **leafpad speedtest-cron.sh**
- This will open a new empty file and name it speedtest-cron.sh
- Enter the following lines:
  - `#!/bin/bash`
  - `date >> /home/pi/speedtest.log`
  - `/usr/local/bin/speedtest --simple >> /home/pi/speedtest.log`
- Save the file
- `./speedtest-cron.sh`

# Setup cron to run script

- In the terminal, enter **crontab -e**
- Add this line at the end of the file
  - 0 \* \* \* \* /home/pi/speedtest-cron.sh
- Save
- This will run the test once an hour at the top of the hour

# Refine speedtest results

- In the terminal, enter **mkdir github**
- **cd github**
- **git clone https://github.com/HenrikBengtsson/speedtest-cli-extras.git**
- **cd speedtest-cli-extras-bin**
- **./speedtest-csv**
- Now you get a single line results with the date and results

# Setup Google Drive and IFTTT

- Create a Google Drive account at <https://drive.google.com>
- Create an IFTTT account at <https://ifttt.com>
- In IFTTT, click on your account name in the top right-hand square and select Services
- Click on the Google Drive square and click on settings in the top right-hand side
- Enter the userid and password for Google Drive to allow IFTTT to access your Google Drive

# Put it all together

- Alasdair Allen has created a recipe on IFTTT that we can use
- <https://ifttt.com/applets/379108p-log-speedtest-results-to-spreadsheet>
- [https://maker.ifttt.com/trigger/speedtest/with/key/{secret\\_key}](https://maker.ifttt.com/trigger/speedtest/with/key/{secret_key})
- <https://gist.githubusercontent.com/aallan/bafc70a347f3b9526d30/raw/b976>
- Edit speedtest-ifttt.sh that you just downloaded and substitute your **SECRET\_KEY**
- ./speedtest-ifttt.sh
- Check Google Drive for a Sheet called Speedtest

# Edit script

- In the terminal, enter **leafpad speedtest-cron.sh**
- Alter the contents to be:
  - `#!/bin/bash`
  - `Date >> /home/pi/speedtest.log`
  - `/home/pi/speedtest-ifttt.sh >> /home/pi/speedtest.log`
  - `Echo "" >> /home/pi/speedtest.log`
- Save
- The test will run once an hour at the top of the hour because we set up the cron earlier