Updated
for Raspbian
Stretch

Raspberry Pi Home Server

Introduction

Mel Grubb

@melgrubb | www.melgrubb.com

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Who Is This Course For?

IT Professionals

Hobbyists

Geeks

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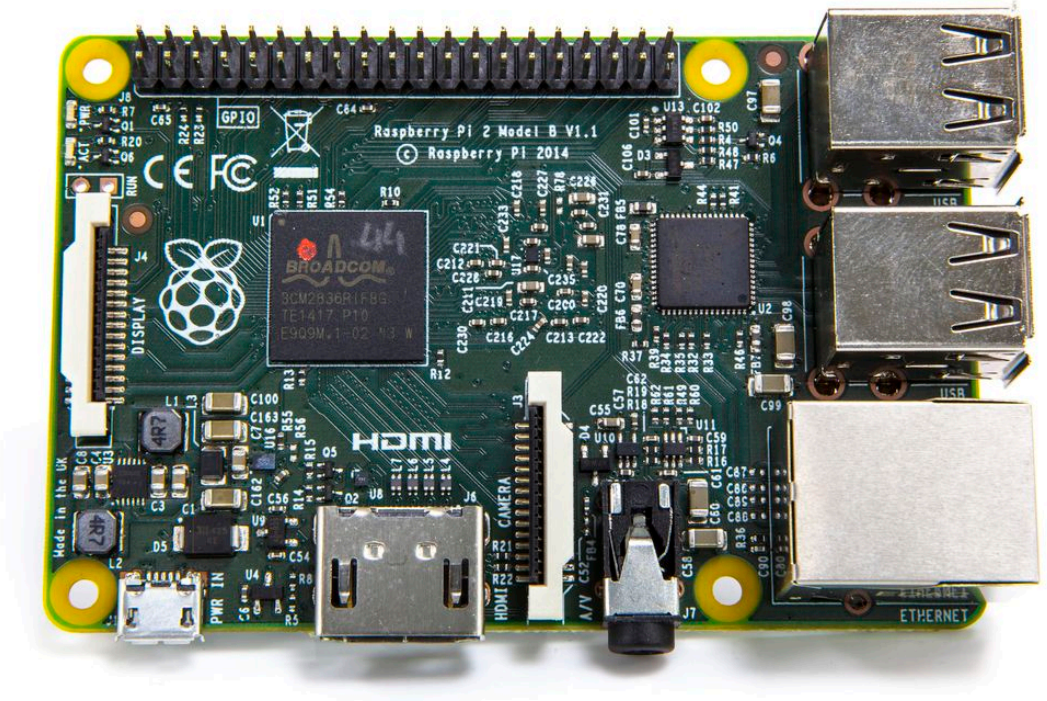
What *Is* a Raspberry Pi?

- Linux computer
- Single-board
- About the size of a deck of cards
- $35
- Created for education
- Adopted by hobbyists



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What Can It Do?

File Server

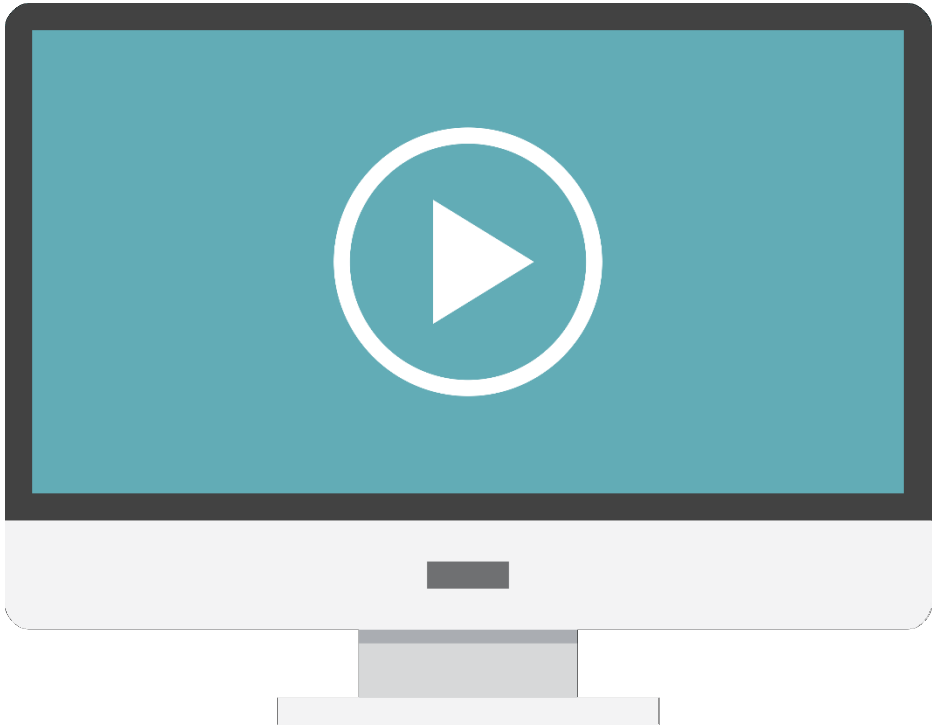
Media Server

Backup Destination

VPN Server

Private Cloud

Wordpress Blog Host



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Why Build Your Own Server?

- Because it's there

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Can It Handle All Of That?

- Raspberry Pi Model A, B, B+ Arm6 Single Core
- Raspberry Pi 2 Model B, Arm7 Quad Core
- Raspberry Pi 2 & 3, A53 Quad Core
- 700 – 1200 MHz
- 512Mb – 1Gb RAM

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What Will It Cost to Run?

- Let's assume 1000 mA average
- 5V * 1A = 5W
- 1000 Wh / 5W = 200 hours to consume 1 kWh
- Roughly 8¢ per kWh right now
- 24 * 366 = 8784 hours in a leap-year
- 8784 / 200 = 43.92 kWh per year
- 43.92 * .08 = $3.51 per year
- That's 0.96¢ per day

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Prerequisites

Raspberry Pi
Power supply (> 1200mA)
SD card (>= 8Gb)
Monitor or TV (HDMI)
Keyboard and mouse
Case (optional)

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Prerequisites

Home Network

Internet access

Network cable for the Pi

OR an available WiFi network

And possibly a WiFi adapter

http://elinux.org/RPi_VerifiedPeripherals

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Prerequisites

External Drive

USB flash or hard drive

Power supply (or powered USB hub)

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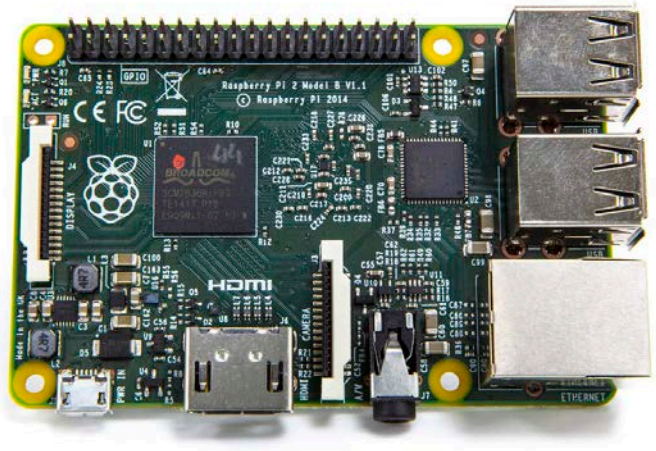
Summary



- What is a Raspberry Pi?
- What can it do?
- What do you need to get started?

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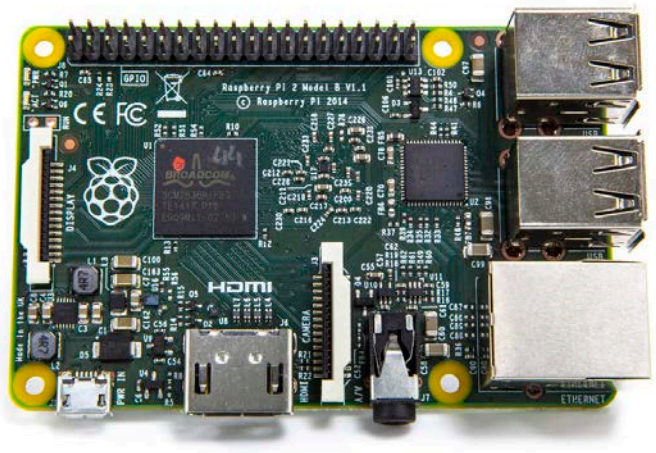
Updates



- Model 3, Zero, and Zero W
- Raspbian Jessie and Stretch
- ~~CrashPlan~~

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Updates

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