



# APPLE TV

Hardware, Software, Content

# INTRODUCTION

- It has been a while since the SBAMUG talked about the Apple TV.
- During a conversation several of us had, it was stated that the Apple TV couldn't do anything by itself, required a computer, and seemed to imply it was useless.
- **NOT TRUE!!!** See the rest of this presentation
- First let's clear up the words Apple TV. Apple TV is a hardware device that hooks up to your TV and lets you access media content from the Internet. This is what this presentation will talk about.
  - The Apple TV app is a program that is on your Apple TV, but can exist on your Mac, iPad, iPhone and even select third party devices. Acts as hub for your purchased/rented movies, and some third-party streaming content services. Flash news now on Android!
  - Apple TV + is a subscription service from Apple that has original content like Ted Lasso or the Sci-Fi series *Silo*

# WHY?

- Well, if you have Oxygen, Food, Water, and Clothing to keep you from Freezing you can live and don't need it. But...
- You invite 30 people to watch the game of the Decade at night. Do you with help bring an TV outside connected to your Apple TV or hand your iphone around to each person during the game?
- Yes, there are other devices. Roku, Google TV streamer, Amazon Fire stick/Cube, Nvidia Shield TV, etc. If you are an Amazon Prime only viewer, maybe a Amazon device makes sense, but an Apple TV is the only device that can live well in Apple's Ecosystem.
- Smart TV- well okay if it works for you. Often updates are not timely or don't happen at all. This leads to security concerns, lack of access to new streaming services, and even the inability to continue to watch previous services when the streaming services updates protocols and the built in TV app stops working. This happened to my Panasonic TV for Netflix.

# Apple TV hardware history

- Apple TV HD Model A1625, A8 Chip Ethernet and Wifi, HDMI 1.4
  - Introduced September 2015, Discontinued October 2022
- Apple TV 4K 1<sup>st</sup> Gen Model A1842, A10x Chip Ethernet and Wifi, HDMI 2.0a
  - Introduced April 2017, Discontinued April 2021
- Apple TV 4K 2<sup>nd</sup> Gen Model A2169, A12 Chip Ethernet and Wifi, HDMI 2.1
  - Introduced May 2021, Discontinued October 2022
- Apple TV 4K 3<sup>rd</sup> Gen Model A2737 WiFi, A2843 Wifi&Ethernet , A15 Chip, HDMI 2.1
  - Introduced Nov 2022, Discontinued –
- Rumors of a new Apple TV Late 2025

# Apple Video and Audio Formats

- The Apple TV latest 3<sup>rd</sup> Gen model can support 4K (3840 X 2160) 60 Hz video and below
- Apple TV 4K 3<sup>rd</sup> Gen can support many Surround Audio formats. Does not support the DTS (as on DVDs/Bluray) but most sources don't provide that
- [https://en.wikipedia.org/wiki/Apple\\_TV](https://en.wikipedia.org/wiki/Apple_TV) This Wikipedia article goes into the details.
- The explanation of the terms is in the links in the article.
  - The full understanding of all these standards and protocols is a super deep hole. I spent probably hundred of hours researching these a while back and had a decent understanding then, but they keep coming up with new standards and I gave up.

# Apple TV Has No DVR

- The Apple TV does not have a Digital Video Recorder (DVR) to record streams for later viewing.
  - Yes, some cable and satellite boxes have this capability along with stand alone recorders.
  - These However, recorders may not work with the Apple TV
- There is no need for a DVR for on demand content.
- However, many of the streaming services do have a virtual cloud DVR service, built in or as an additional Add on, or as part of a premium tier.

# What you need for an Apple TV

- Internet

- 25 Mbps minimum is required for 4K 60 Hz. Lower resolutions require less. Note other devices/users could take up bandwidth, and also this is a sustained speed. If you see slowdowns in the evening on your internet service, this could be an issue.
- The Apple TV 3rd Gen lower cost model A2737 is WiFi only, won't work if your internet is wired ethernet cables only

- TV Set with HDMI input

- I did see HDMI to composite RCA jack converter boxes if your set is too old to have HDMI
- Even saw HDMI to coax antenna converter boxes for really old TV. But a standard definition TV is not going to give you the HD resolution

- HDMI Cable

- Not included. Get one long enough to connect to your TV
- For 4K sets cable should say 4K, or HDMI 2.0 and or 2.1, or words "Ultra Premium"

# What you need for an Apple TV

## Cont'd

- Apple Account (formally known as Apple ID)
  - Required to use Apple TV app, App Store, Apple TV Plus
  - This is the only thing that would require another Apple device to sign up. Suppose one could go to a Library computer to sign up



# Getting Audio from the Apple TV

- It almost goes without saying that when the Apple TV is connected to a TV set with an HDMI cable, the sound will come out on the TV. If your TV is mono, then the sound will be in mono.
- Bluetooth: You can use Bluetooth devices
  - AirPods (silent listening) Homepods
  - Many third-party Bluetooth devices
- AVR Receivers (Home Theater)
  - You run the HDMI cable from the Apple TV to the receiver. There is already a cable from the AVR receiver to the TV if you set it up per instructions
  - Best sound quality in almost all cases

# Screen Mirroring and Airplay

- On an iPhone or iPad you can either use Screen Mirroring or Airplay to send data (video etc) to your Apple TV. Macs can use Airplay
- Screen Mirroring on iPhone or iPad
  - What is on your screen is sent to the Apple TV
  - Great for apps that can't Airplay. Example need to come up with a budget plan in Numbers. Invite folks to watch in your living room going to the Apple TV and then to your TV.
- Airplay
  - Stream content to your apple TV from iPad, iPhone, or Mac Include non internet content
  - Will send Internet content to the Apple TV directly
  - You can do other things like check your email on your iPad or iPhone while the streaming continues.
  - Note some apps may not support Airplay

# iCloud Based Apps on Apple TV

- Before we go to streaming media content providers lets talk about some native apps that you use on your other Apple devices.
- These are iCloud based. Something that's only local can't be accessed
- Podcasts:
  - Listen to the Podcasts you have
- Music:
  - Listen to your Music.
  - This includes music videos, so you can't say that is makes no sense to listen to Audio only music
- Photos:
  - Perfect for showing your Photos in iCloud to large Groups.

# Gaming

- You can play games on the Apple TV
  - You can purchase games
  - You can also subscribe to Apple Arcade subscription plan
- We have not mentioned the Apple TV remote. Can be used for simple games, but most games really need a dedicated game controller/
  - Apple sells a few in there online/retail stores Many third-party ones
- The games range from very simple arcade types to relatively decent action games especially on the Apple TV HD third generation
- The real high-end games that challenge the fastest macs or even the highest end Windows gaming computers will not be able to run.

# Facetime

- Yes you can do facetime on an Apple TV
- No the Apple TV does not have a camera or Microphone so you will need to use another Apple device as the camera/microphone
- <https://support.apple.com/guide/tv/facetime-app-at-a-glance-atvb874c905e/tvos>

# Internet Browser

- **No**

- Apple has never explained why, but poor user interface with remote, inability to say drop files to upload, store downloaded files, and security concerns are likely issues.
- But there is a Youtube App for the Apple TV. You can search, watch, stop, go backwards and forwards when viewing.
- Zoom: Yes there is a zoom app. Like the facetime app you will need an Apple TV 4K 2<sup>nd</sup> Generation or later, iPhone or iPad post 2018, IOS TVoS 17+
- Youtube TV will be discussed later

# Streaming Content

- A Few points before we get started:
  - This list cannot be a comprehensive list, there is not enough time or slides to make that happen
  - I will list a few of the big names and also a few that I use
  - I also cannot give a list of all the content available on each service. You can look this up
  - Yes, chime in on your favorites, but we do have time limits.

# Apple TV App Content

- Let us first start with Apple's Own Content via the Apple TV App
- As a Hub and can launch other Streaming Services
- But you can get thousands of Movies to either Purchase or Rent
  - Rentals must be watched before 30 days pass and once you start as many times as you want in 48 hours
  - Purchased Movies are yours to watch
  - Best info is that Purchased Movies have a perpetual license to stream, they are not stored on the Apple TV hardware
  - MLS season pass is available with a subscription
- Apple TV Plus is a added subscription streaming plan. Watch Friday Night MLB and exclusive shows like Ted Lasso, Severance, Silo etc Has Kids content too
- <https://support.apple.com/guide/tvapp/welcome/web>



# Free Third-Party Streaming

- Free with advertisements (for the most part)
- Realize you won't get most premium content (PPV fights, ESPN, First run movies etc.)
- Pluto TV: Movies, old TV shows, some live content etc. Has shows listed in a grid format
- Tubi TV: Movies, Old TV shows, movies no live content
- Stirr: Movies, old TV shows, some live content etc. Less content than the above two
- Specialized ones NASA TV: They did away with linear feed to Cable & Satellite providers
  - No Ads – its government
- Disclosure Have all these above on my Apple TV
- Note there are some free but you must have paid subscription like PBS passport and Fox Sports.
- Directv & Dish (Sling) now have some limited free content

# Paid Third-Party Streaming

- Netflix-Movies, No live TV per se, but live sports and award show events
- Hulu- Movies, Live Channels
- Disney +
- Amazon Prime Video
- Youtube TV-live Channels movies
- HBO MAX- live HBO streams, Movies
- TV Network:
  - CBS Paramount +
  - NBC Peacock
- Satellite Providers
  - Directv Streaming
  - SLING (Dish Network)

# Paid Third-Party Streaming(cont'd)

- Sports:
  - ESPN +
  - FanDuel West and SoCal: Not cheap
- Low Cost? Frndly Basic \$7.99 Month, DVR classic and Premium cost more
  - Basic SD and 720p only
  - 50 channels I found 14 that I can get as over the air subchannels for Free!
  - No TNT, ESPN, News Channels etc.

# Q&A ?

- Comments
- Q&A ?