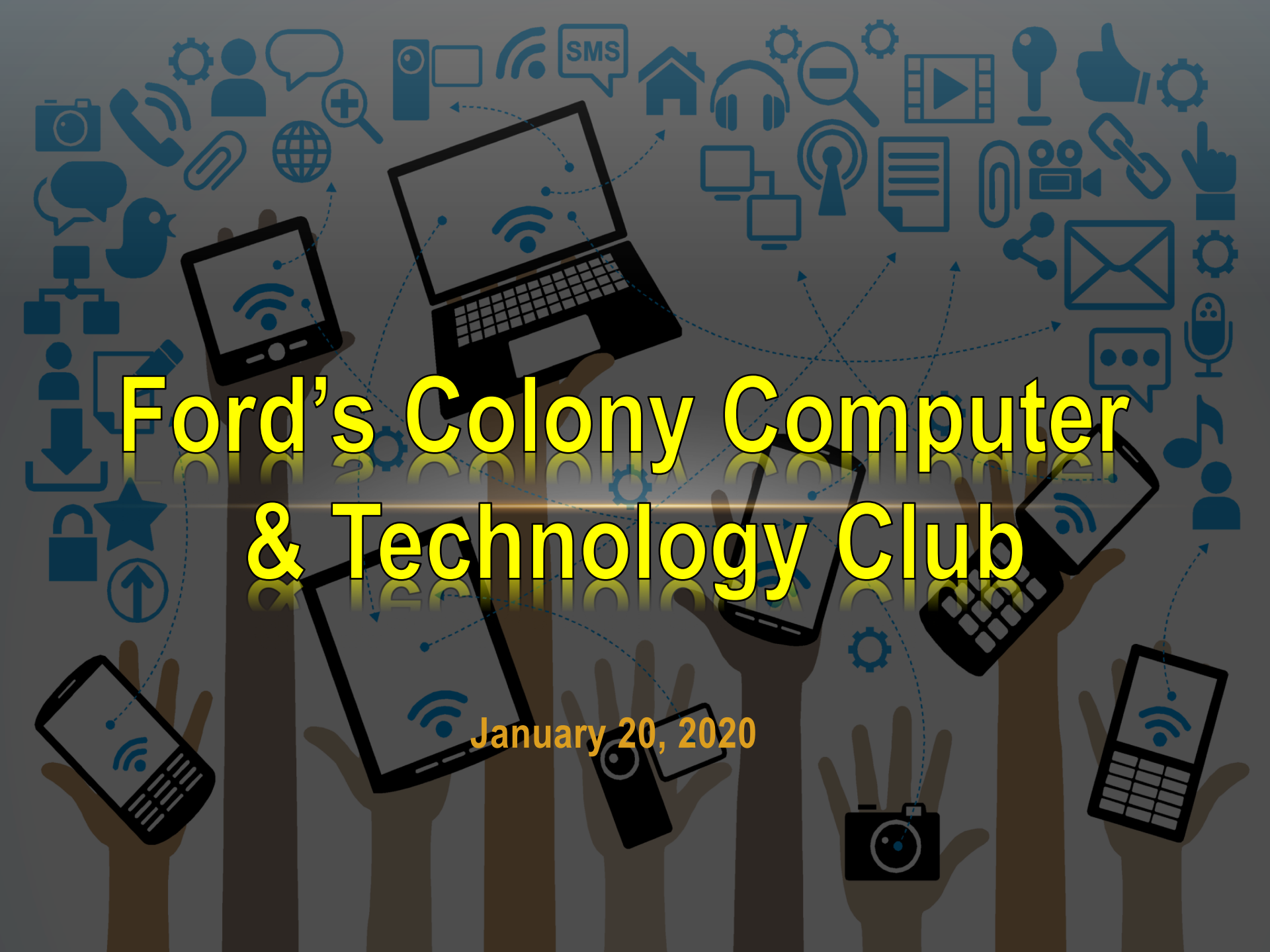


Ford's Colony Computer & Technology Club

January 20, 2020

SOME QUESTIONS FOR YOU

- Do you have a collection of favorite movies or TV shows on DVDs that you haven't played for some time? Why?
- Do you have a collection of favorite music on CDs that you haven't played for some time? Why?
- Are your photos and/or home videos stored in applications or just files on your computer, tablet or smartphone? Or different versions on multiple devices and locations?
- Would you and your family like easy access to your prized collections of any or all of the above?
- Would you and your family like to be able to view/play your media on almost any device?

PLEX

WHAT IS PLEX ?

- Plex Media Server is:
  - a digital media player,
  - and a media organizational tool,
  - Enables you access to your music, pictures, and videos stored on one computer (library) with any other computer or compatible mobile device (smartphones, tablets and streaming devices)

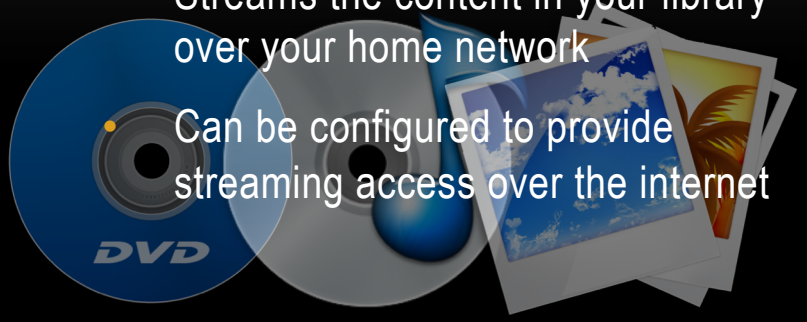
PLEX

And it's FREE!

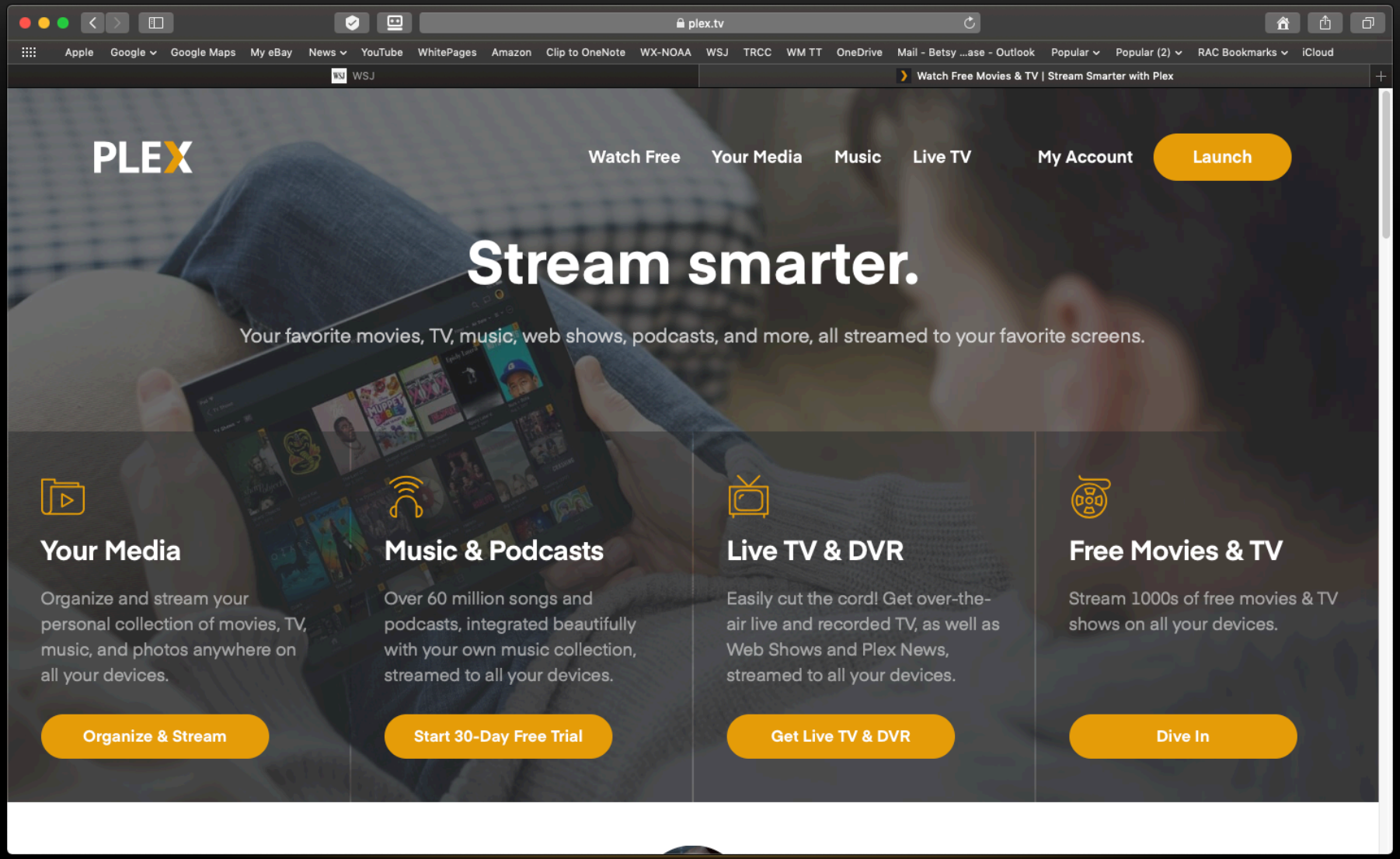
WHAT IS PLEX ?

- PLEX is Media Server S/W that can be installed on:
  - a Windows, Mac, or Linux computer,
  - Or on a compatible network-attached storage (NAS) device
- PLEX Media Server S/W and its various device apps are FREE
- Most likely, you'll need to invest in additional storage for the files in your media library – typically an external hard disk drive (HDD) or network attached storage (NAS).

- Streams the content in your library over your home network
- Can be configured to provide streaming access over the internet



PLEX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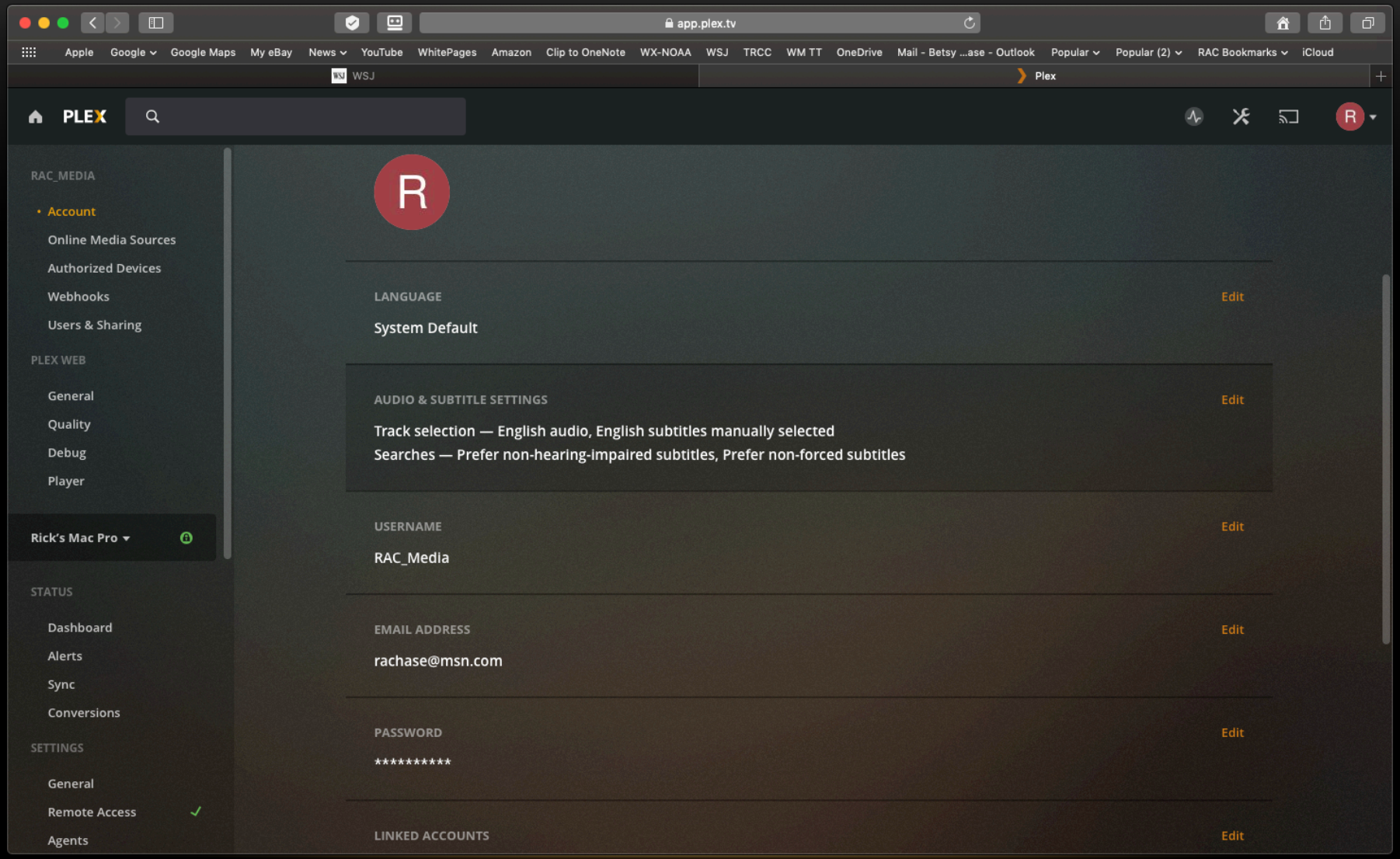
Popular (2)
RAC Bookmarks
iCloud
WSJ
Watch Free Movies & TV | Stream Smarter with Plex
PLEX
Watch Free
Your Media
Music
Live TV
My Account
Launch
Stream smarter.
Your favorite movies, TV, music, web shows, podcasts, and more, all streamed to your favorite screens.
Your Media
Organize and stream your personal collection of movies, TV, music, and photos anywhere on all your devices.
Organize & Stream
Music & Podcasts
Over 60 million songs and podcasts, integrated beautifully with your own music collection, streamed to all your devices.
Start 30-Day Free Trial
Live TV & DVR
Easily cut the cord! Get over-the-air live and recorded TV, as well as Web Shows and Plex News, streamed to all your devices.
Get Live TV & DVR
Free Movies & TV
Stream 1000s of free movies & TV shows on all your devices.
Dive In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Account
Online Media Sources
Authorized Devices
Webhooks
Users & Sharing
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General
Quality
Debug
Player
Rick's Mac Pro
STATUS
Dashboard
Alerts
Sync
Conversions
SETTINGS
General
Remote Access
Agents
R
LANGUAGE
Edit
System Default
AUDIO & SUBTITLE SETTINGS
Edit
Track selection — English audio, English subtitles manually selected
Searches — Prefer non-hearing-impaired subtitles, Prefer non-forced subtitles
USERNAME
Edit
RAC_Media
EMAIL ADDRESS
Edit
rachase@msn.com
PASSWORD
Edit
****
LINKED ACCOUNTS
Edit

TYPICAL HW CONFIGURATIONS FOR PLEX

PLEX Media Server

Windows, MAC or Linux PC

Media server S/W **and** media resides on the PC

Your Network

PLEX Using a Browser

Windows, MAC or Linux PC

PLEX Using a Client APP

SmartPhones
Tablets

Streaming STB's (Apple TV, ROKU, etc.) & Smart TV's

HW CONFIGURATION OPTIONS FOR PLEX

PLEX Media Server

Windows, MAC or Linux PC

External HDD
(Hard Disk Drive)

Media server S/W resides on PC
Media resides on the Ext. HDD

Your Network

PLEX Using a Browser

Windows, MAC or Linux PC

PLEX Using a Client APP

SmartPhones
Tablets

Streaming STB's
(Apple TV, ROKU,
etc.) & Smart TV's

HW CONFIGURATION OPTIONS FOR PLEX

PLEX Media Server

Windows, MAC or Linux PC

Network Attached Storage (NAS)*

Your Network

PLEX Using a Browser

Windows, MAC or Linux PC

PLEX Using a Client APP

SmartPhones
Tablets

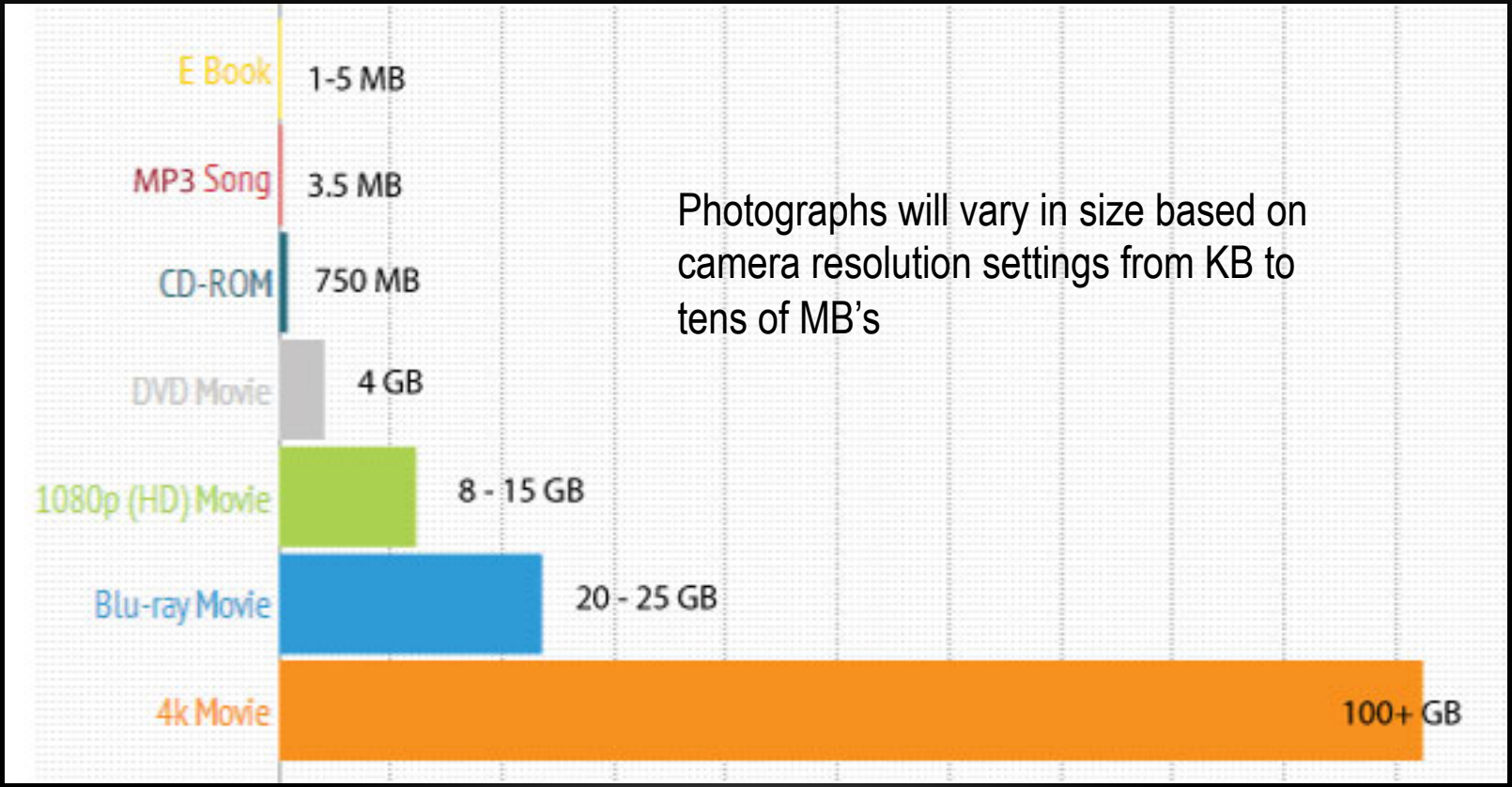
Streaming STB's (Apple TV, ROKU, etc.) & Smart TV's

*Some NAS' can run PLEX Media Server independently, check PLEX website for compatibility

CONVERTING YOUR MEDIA TO FILES

- If your desired movies, TV shows or music are in a physical storage format (e.g. DVD, CD, etc.) you will need to convert your media to a computer file format.
- These processes are sometimes called:
  - "Ripping" for audio CD's
  - Remuxing and/or transcoding for DVD's
- You will need 3rd party S/W to perform these conversions
  - Audio "Ripping" S/W
    - iTunes for MAC or Windows PC
      http://itunes.com/
    - Windows Media Player for Windows PC
      https://support.microsoft.com/en-us/help/14209/get-windows-media-player
  - Video REMUXing S/W
    - MakeMKV http://makemkv.com
    - DVDFAB https://www.dvdfab.cn/
  - Transcoding S/W
    - Wondershare Uniconverter
      https://videoconverter.wondershare.net/

TYPICAL MEDIA FILE SIZES



FILE SIZE CONSIDERATIONS

- UHD (4K) > HD (1080) > SD (480)
- If original video media is SD, there is no need to upconvert the resolution.
- Only BluRay DVD's contain HD content.
- Ultra High Definition (UHD) resolution is 2160 p/i; High Definition (HD) can be 720p/i or 1080p/i. P = progressive scan; i = interlaced scan. Most HD TV content is 720p/i.
- If intended playback devices have screen sizes of <32" diagonal; consider down converting your HD videos to SD

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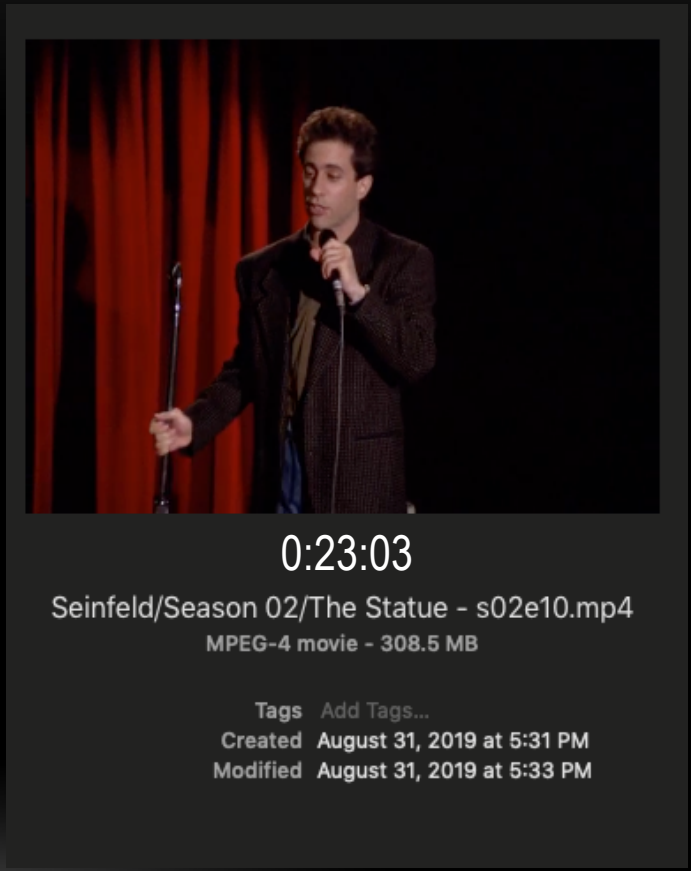
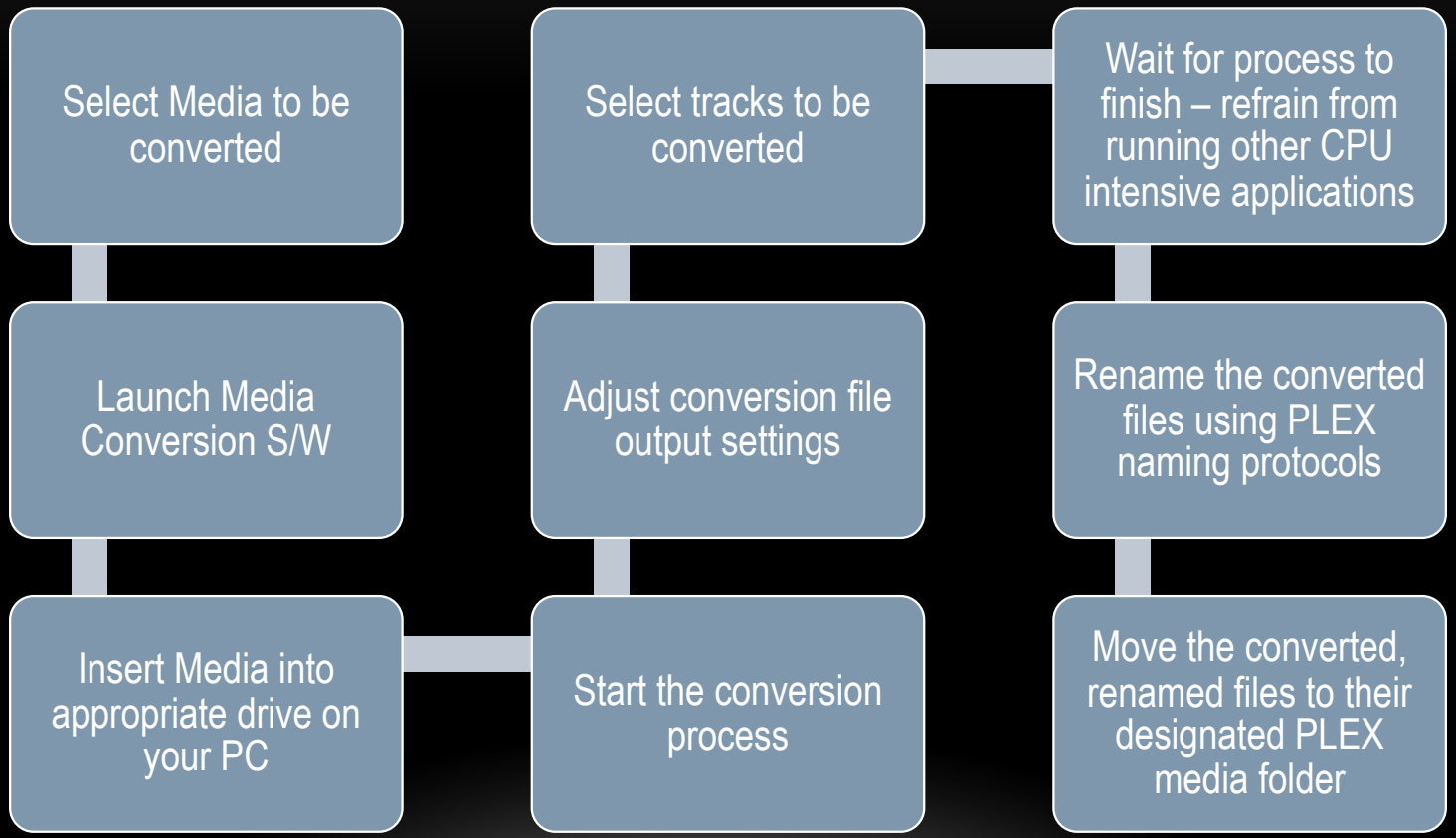
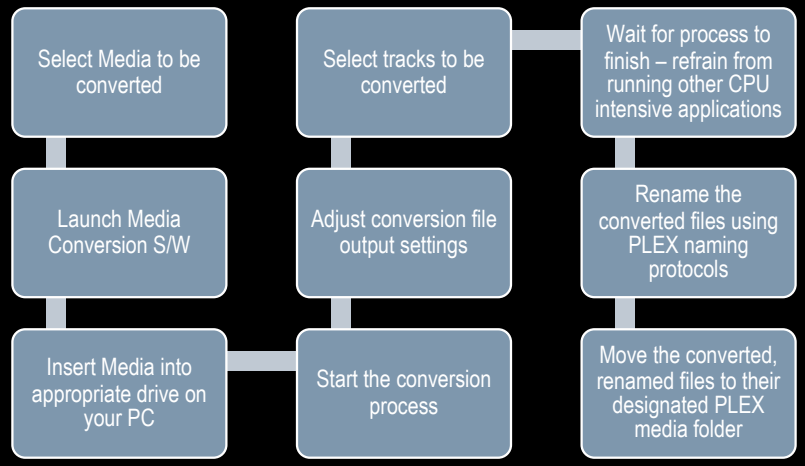


MEDIA FILE TO PLEX WORKFLOW



MEDIA FILE TO PLEX WORKFLOW - TIPS

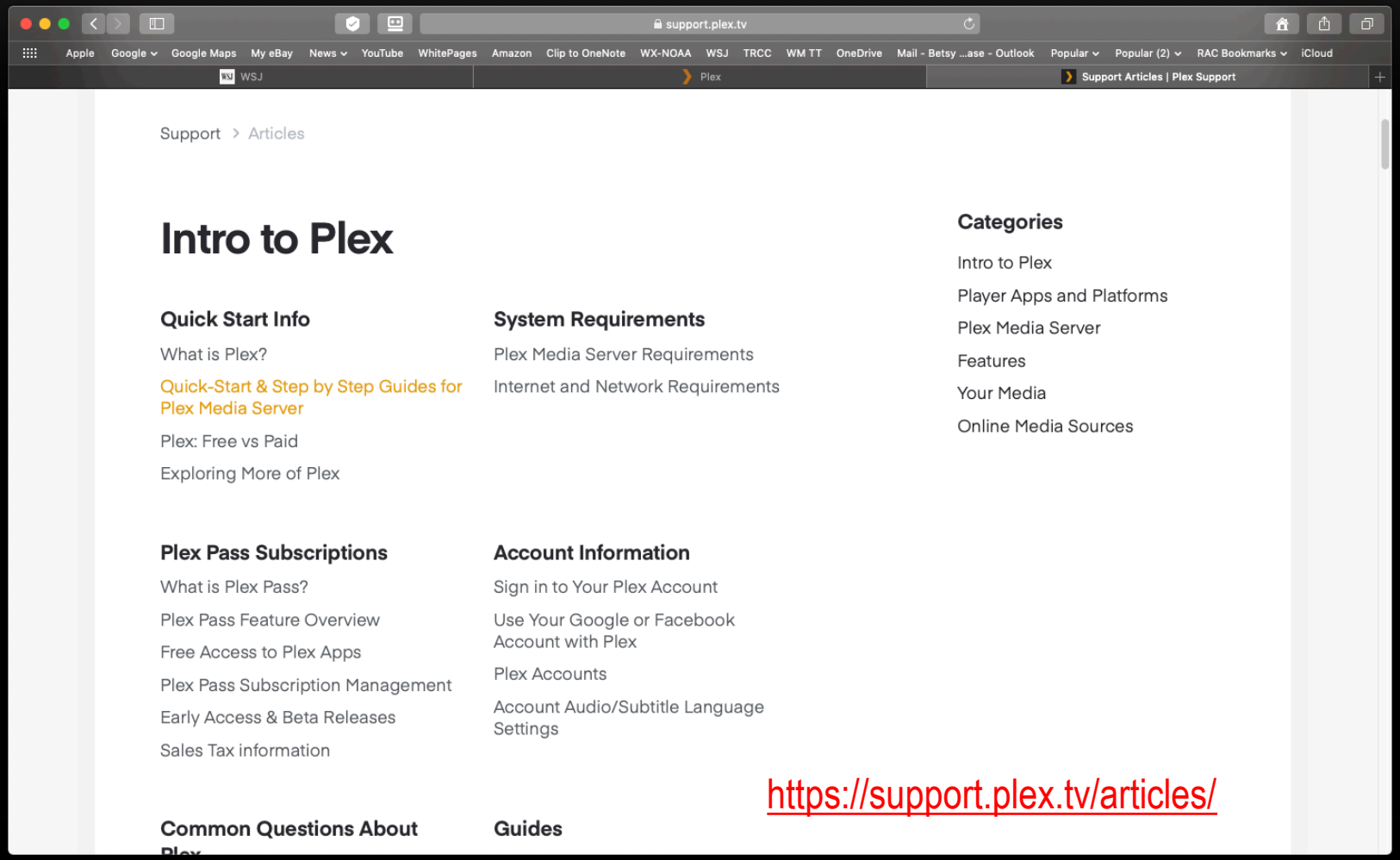
- Create and use a temporary, staging folder to initially store your converted media
- Using the PLEX naming protocols, rename the files while still in the temporary, staging folder
- As recommended by PLEX, use separate folders for Movies, TV Shows, Other Video, Music, etc.
- Use subfolders within these master category folders for your converted media.
- Once you then move the renamed media from the staging folder to the master folders that you have PLEX connected to, the content name will be scanned and the metadata will populate linked to the appropriate media.



FILE NAMING

- PLEX has the capability of leveraging information off online media information databases to automatically provide thumbnail descriptions, pictures, trailers and theme music and linking same with your content.
- To make this work, you need to carefully follow PLEX's file naming protocols.

PLEX SUPPORT ARTICLES



PLEX FILE NAMING PROTOCOLS

Your Media

Movie Files (Naming and Organizing)

Naming and organizing your Movie files

Multi-Version Movies

Local Media Assets – Movies

Local Files for Trailers and Extras

Special Keyword File/Folder Exclusion

ISO, IMG, and Video_TS Movie files

TV Show Files (Naming and Organizing)

Naming and Organizing Your TV Show Files

Local Media Assets – TV Shows

Special Keyword File/Folder Exclusion

Music Files (Naming and Organizing)

Identifying Music Media Using Embedded Metadata

Adding Local Artist and Music Videos

Adding Local Lyrics

Adding Music Media From Folders

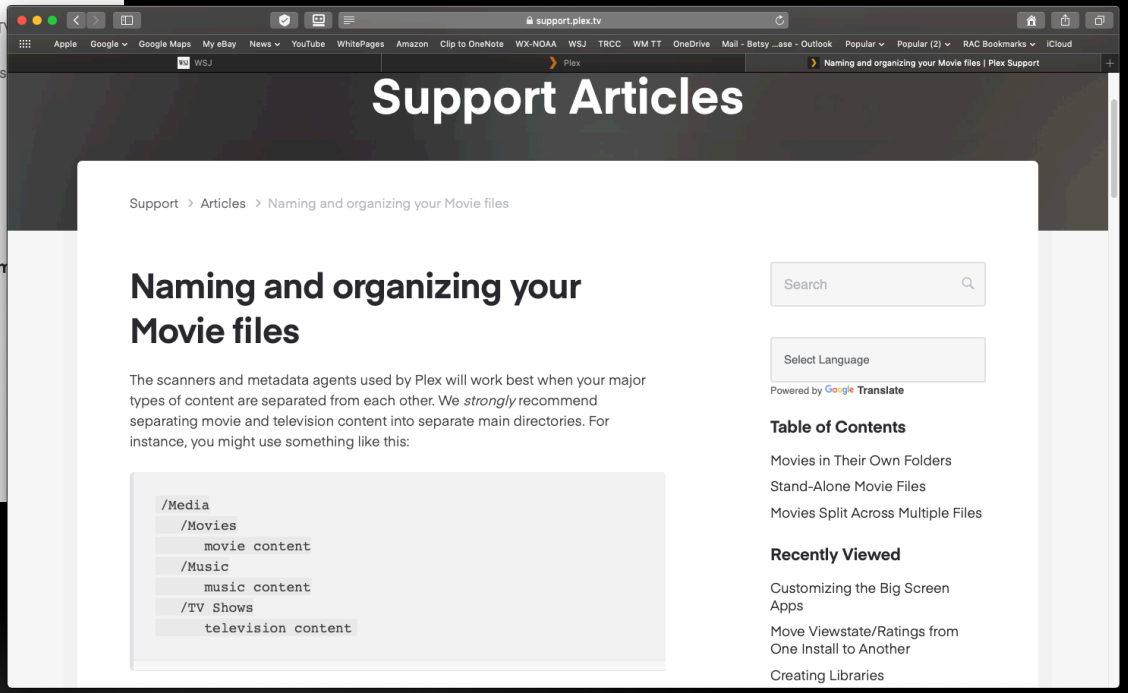
Special Keyword File/Folder Exclusion

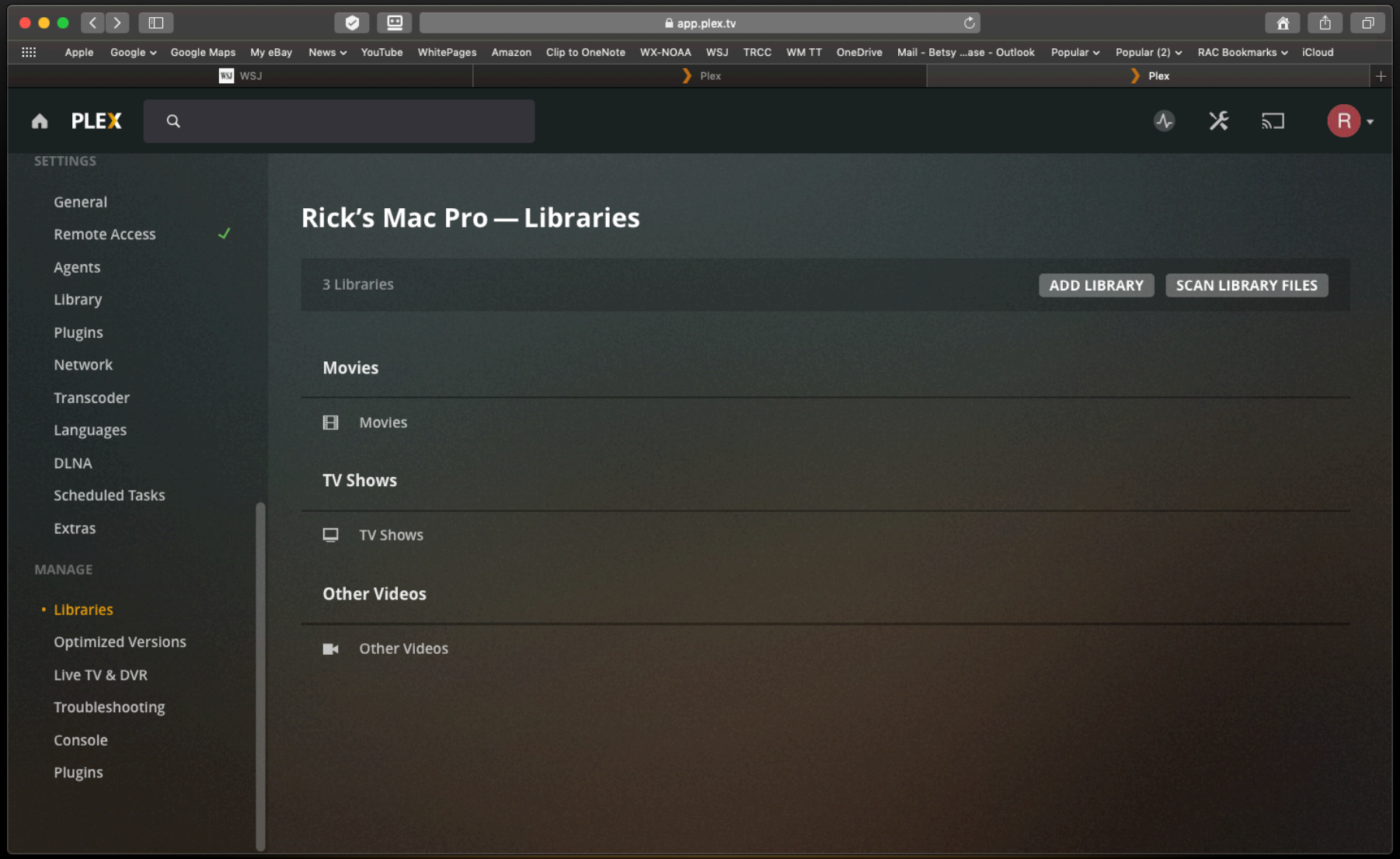
Personal Media Files (Nam and Organizing)

Personal Media Movies

Naming Home Series Media

Special Keyword File/Folder Exclusion

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Remote Access
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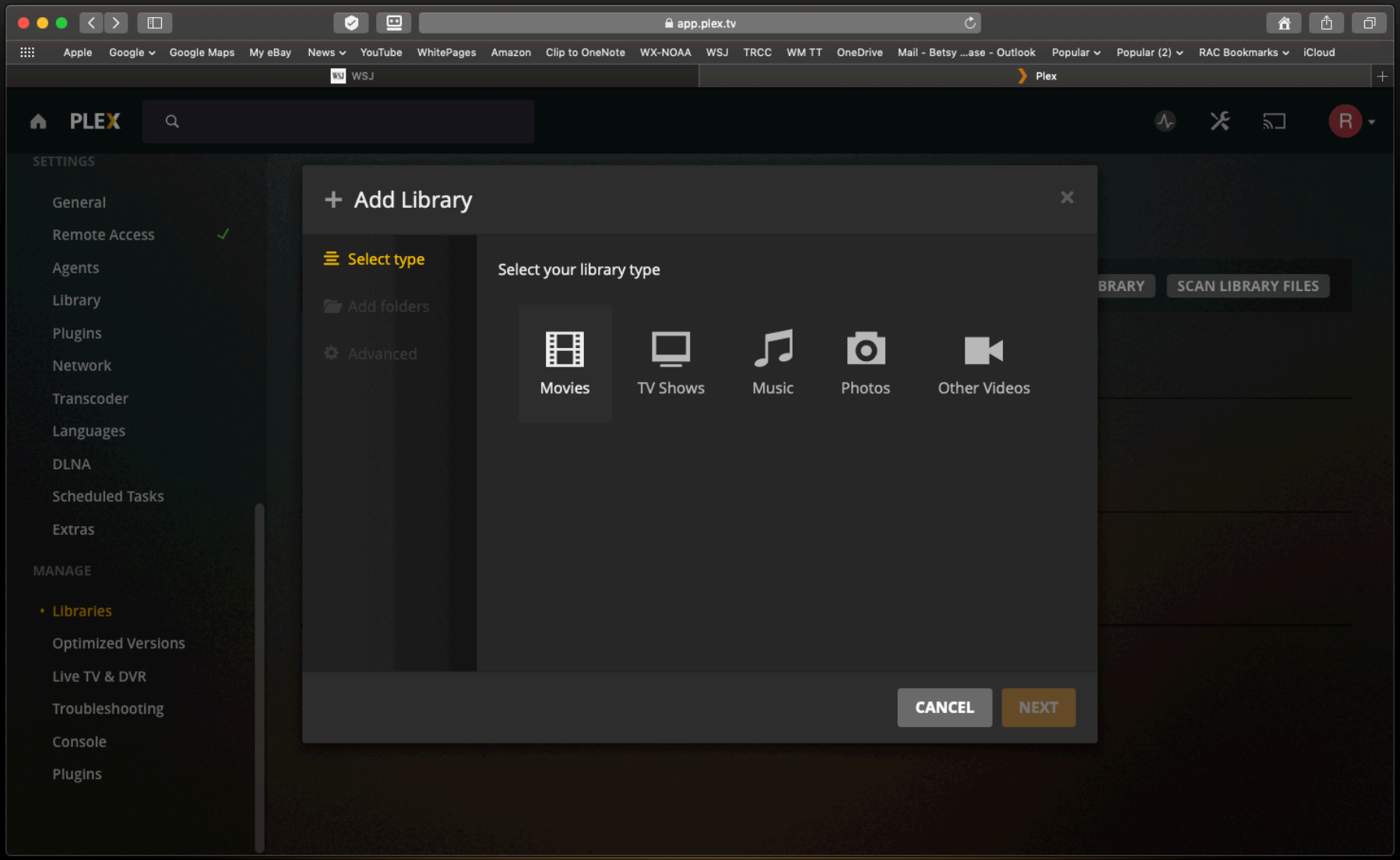
Transcoder
Languages
DLNA
Scheduled Tasks
Extras
MANAGE
Libraries
Optimized Versions
Live TV & DVR
Troubleshooting
Console
Plugins
Rick's Mac Pro — Libraries
3 Libraries
ADD LIBRARY
SCAN LIBRARY FILES
Movies
Movies
TV Shows
TV Shows
Other Videos
Other Videos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Console
Plugins
Add Library
Select type
Add folders
Advanced
Select your library type
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Other Videos
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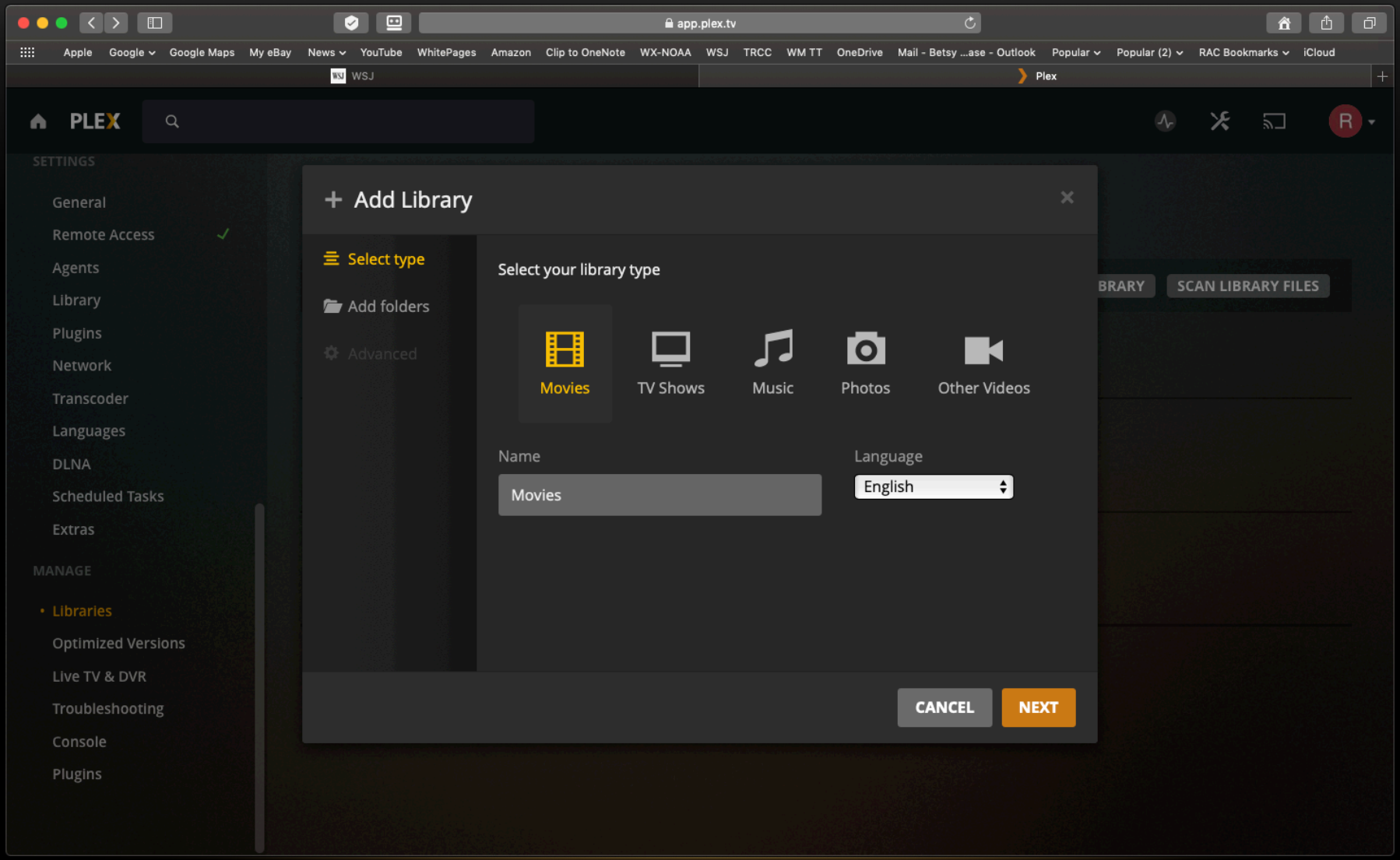
BRARY
SCAN LIBRARY FILES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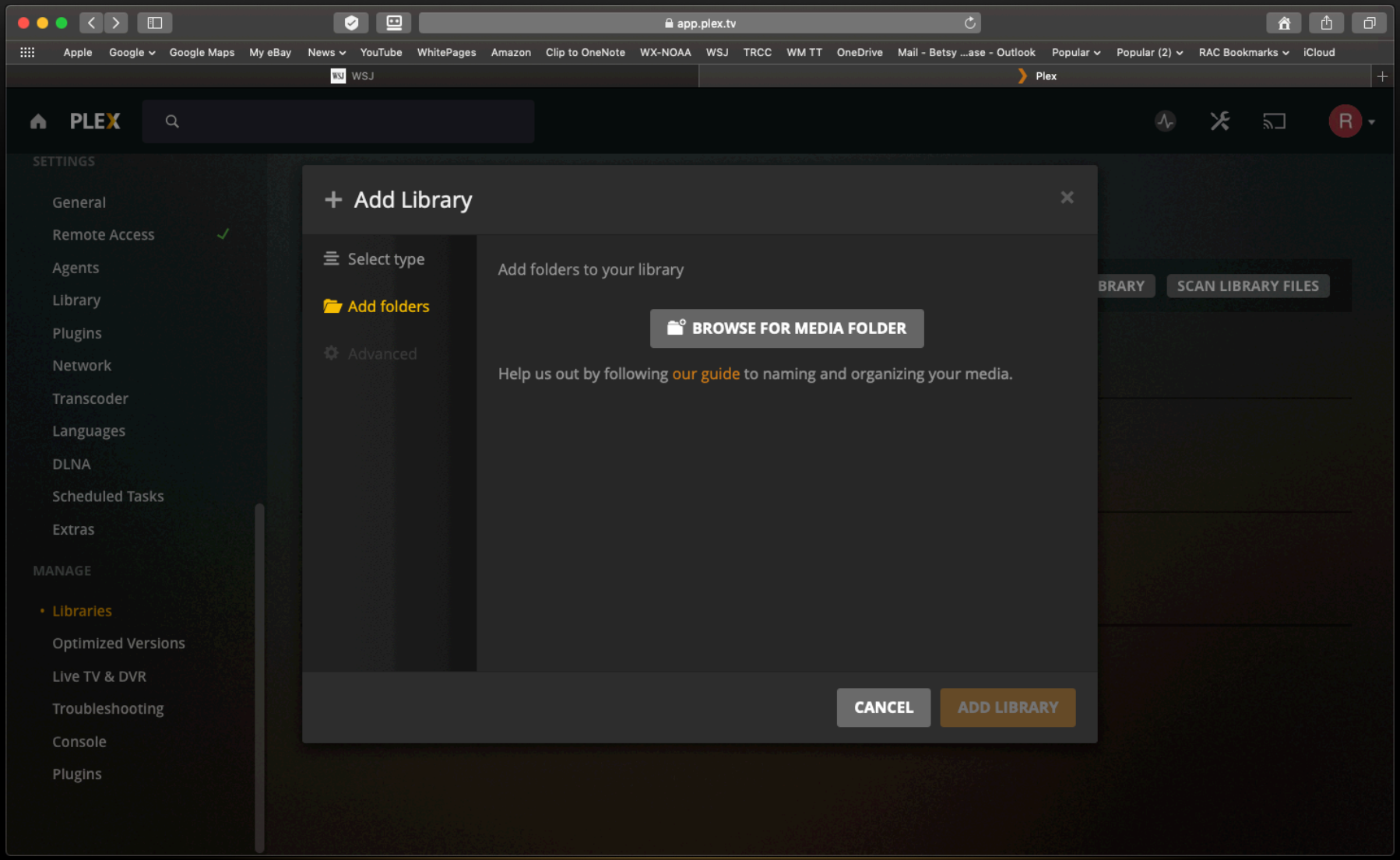
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BROWSE FOR MEDIA FOLDER
Help us out by following our guide to naming and organizing your media.
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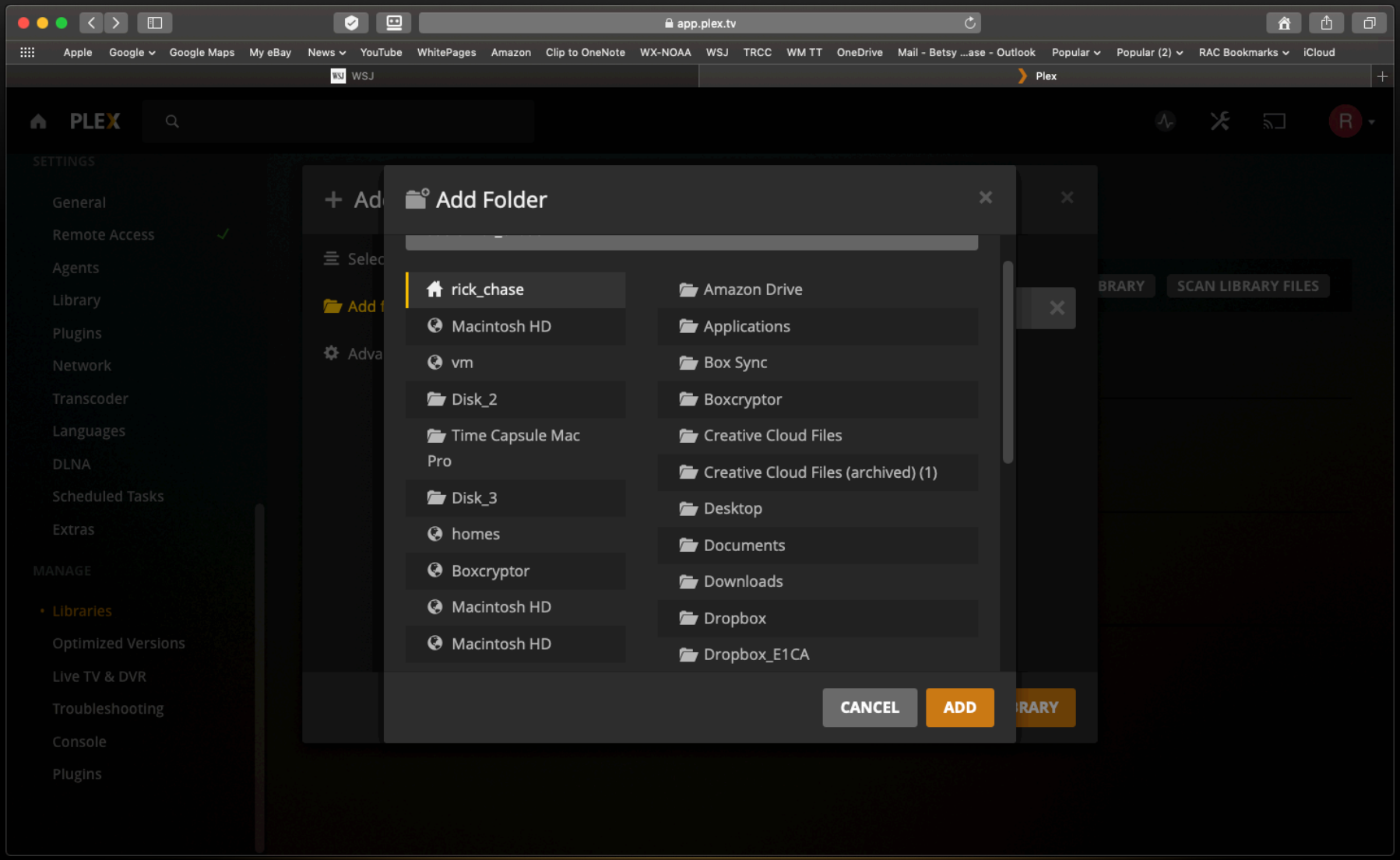
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Box Sync
Boxcryptor
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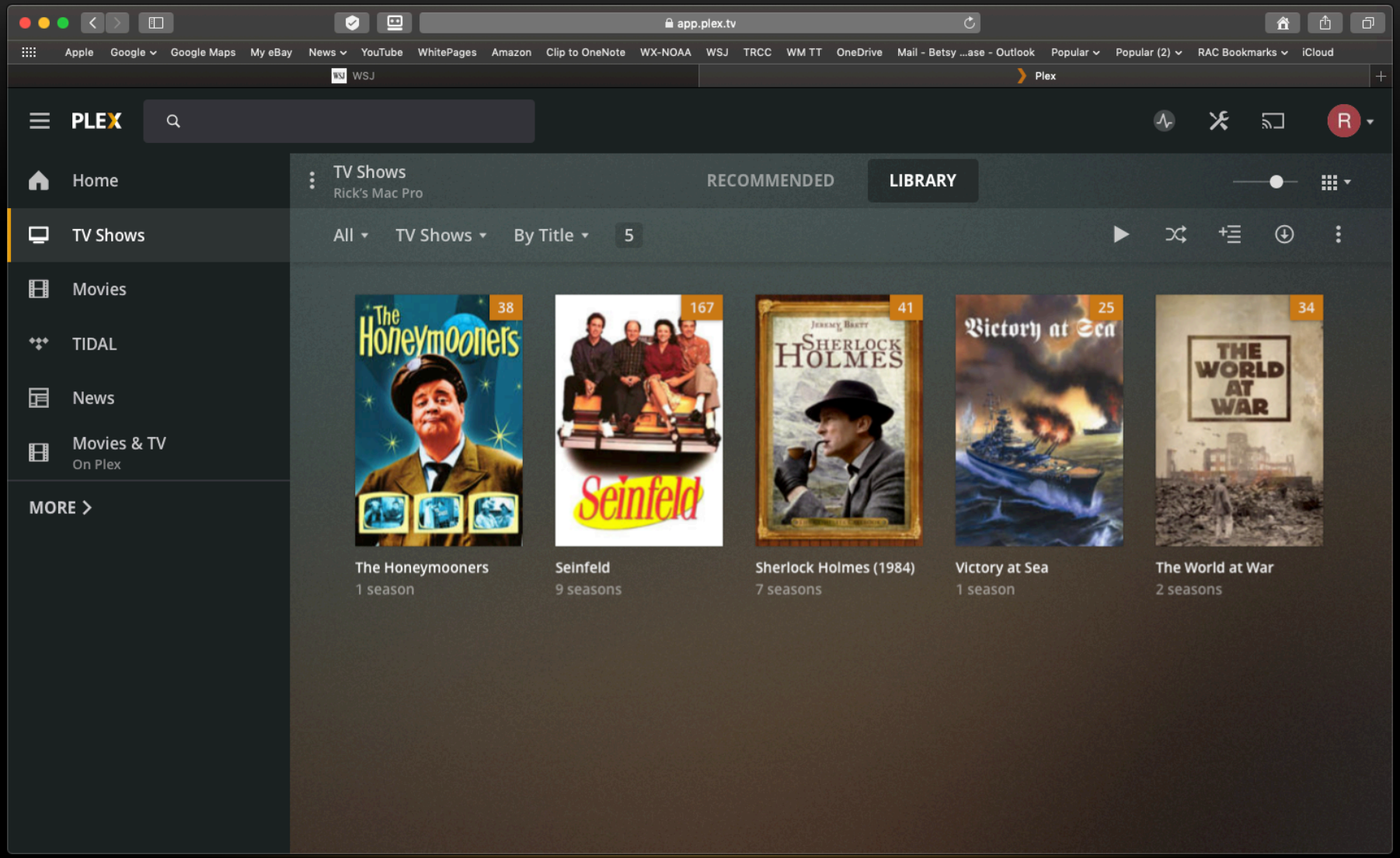
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RECOMMENDED
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TV Shows
By Title
5
38
The Honeymooners
1 season
167
Seinfeld
9 seasons
41
Sherlock Holmes (1984)
7 seasons
25
Victory at Sea
1 season
34
The World at War
2 seasons

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On Plex
MORE
TV Shows
Rick's Mac Pro
Seinfeld
Seinfeld
1989
93%
On Deck — S8 · E10
TV-PG
Comedy
STUDIO
NBC
Jerry Seinfeld is a very successful stand-up comedian, mainly because the people around him offer an endless supply of great material. His best friend is George Costanza, a bald, whiny loser who craves the kind of success Jerry has but is never
READ MORE
SEASONS
Season 1
Season 2
Season 3
Season 4
Season 5
Season 6
Season 7

Rick's Mac Pro — Remote Access

HIDE ADVANCED

Fully accessible outside your network

You can access this server from signed-in Plex apps or in a browser at https://plex.tv/web.

DISABLE REMOTE ACCESS

You currently have Remote Access enabled through a manually-specified port. If you wish to disable Remote Access, you will need to remove your manual port forwarding from your router.

Private 192.168.1.101 :NNNNN Public 12.345.678.123 :NNNNN Internet

Manually specify public port NNNNN APPLY

You may need to enable this to establish a direct connection from outside your network. You may also need to configure your router. Detailed instructions are available here.

Internet upload speed 20 Mbps

You can use speedtest.net to determine your internet upload capacity.
Enter an upload speed here and Plex can ensure it operates within this boundary.

Limit remote stream bitrate 10 Mbps (1080p)

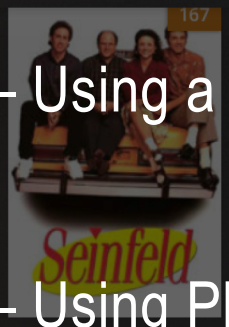
Set the maximum bitrate of a remote stream from this server.

SAVE CHANGES

DEMO - SCENARIO 1 – SMART TV/STREAMING STB

PLEX DEMOS

- Scenario 2 – Using a Browser
- Scenario 3 – Using PLEX Mobile APP



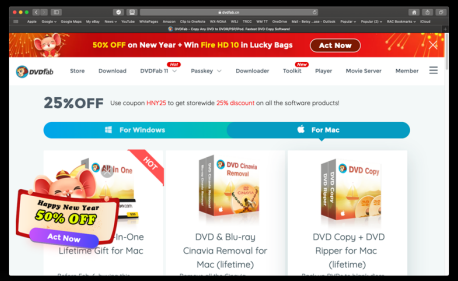
MY PERSONAL SETUP

Hardware

- Synology DS414 NAS 10TB

Conversion S/W

- For Remuxing: DVDFAB
- For Transcoding: Wondershare Uniconverter
- Both Windows & Mac versions available



POSTSCRIPT

- Can PLEX support multiple simultaneous streams?
- Answer: Yes, but it depends on how powerful the CPU is in the PC or Mac you are using as your PLEX Media Server.
- And if streaming over the Internet, the upload capacity of your level of ISP service. D/L speeds and U/L speeds are usually asymmetrical, e.g. Service with D/L of 150Mbps and U/L may be only 15MBps.