# WIN10 EDITING – NEW DESIGN IDEAS

Summary: The purpose of this document is to understand the mobile app requirements

## *10 Active Sources*

Dumb Streaming Sources

PTZ Controlled Streaming Sources

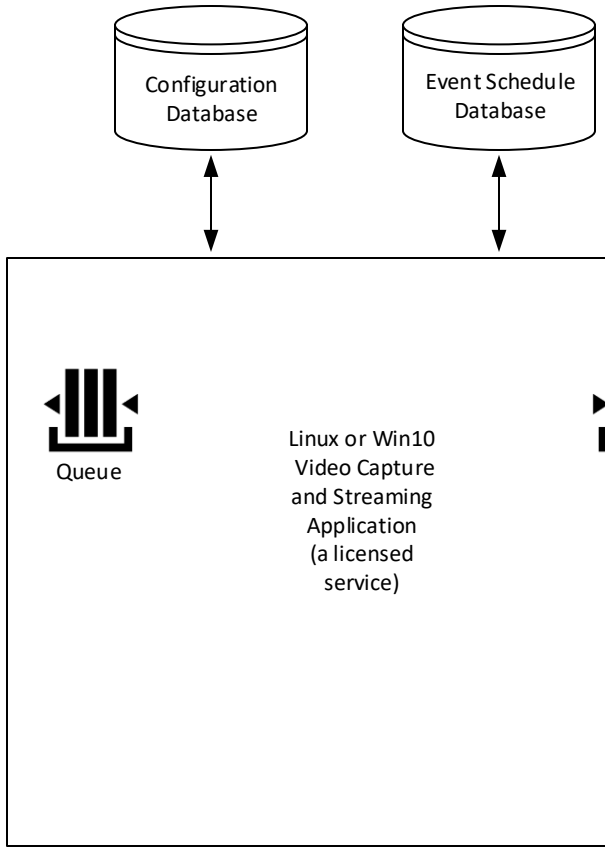
PTZ Controlled Mobile Device

Manual Controlled Mobile Device

Local Camera Operator

Sensor Data Sources

## *Configuration*




## *Controllers*

Tagging App

Mobile App

Event Schedule

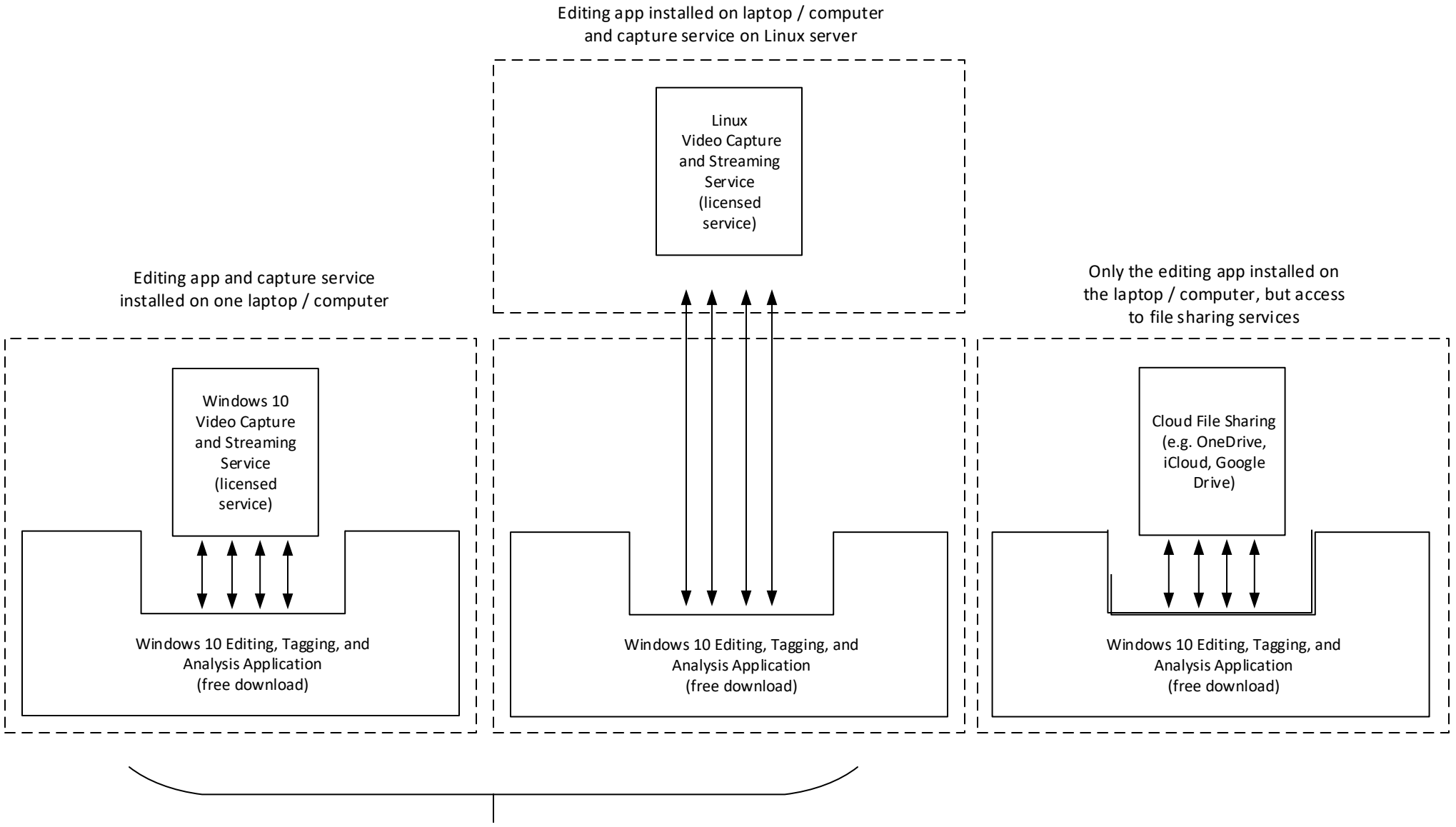
## *10 Active Consumers*


Request Video File from Server

Request Video Stream from Server

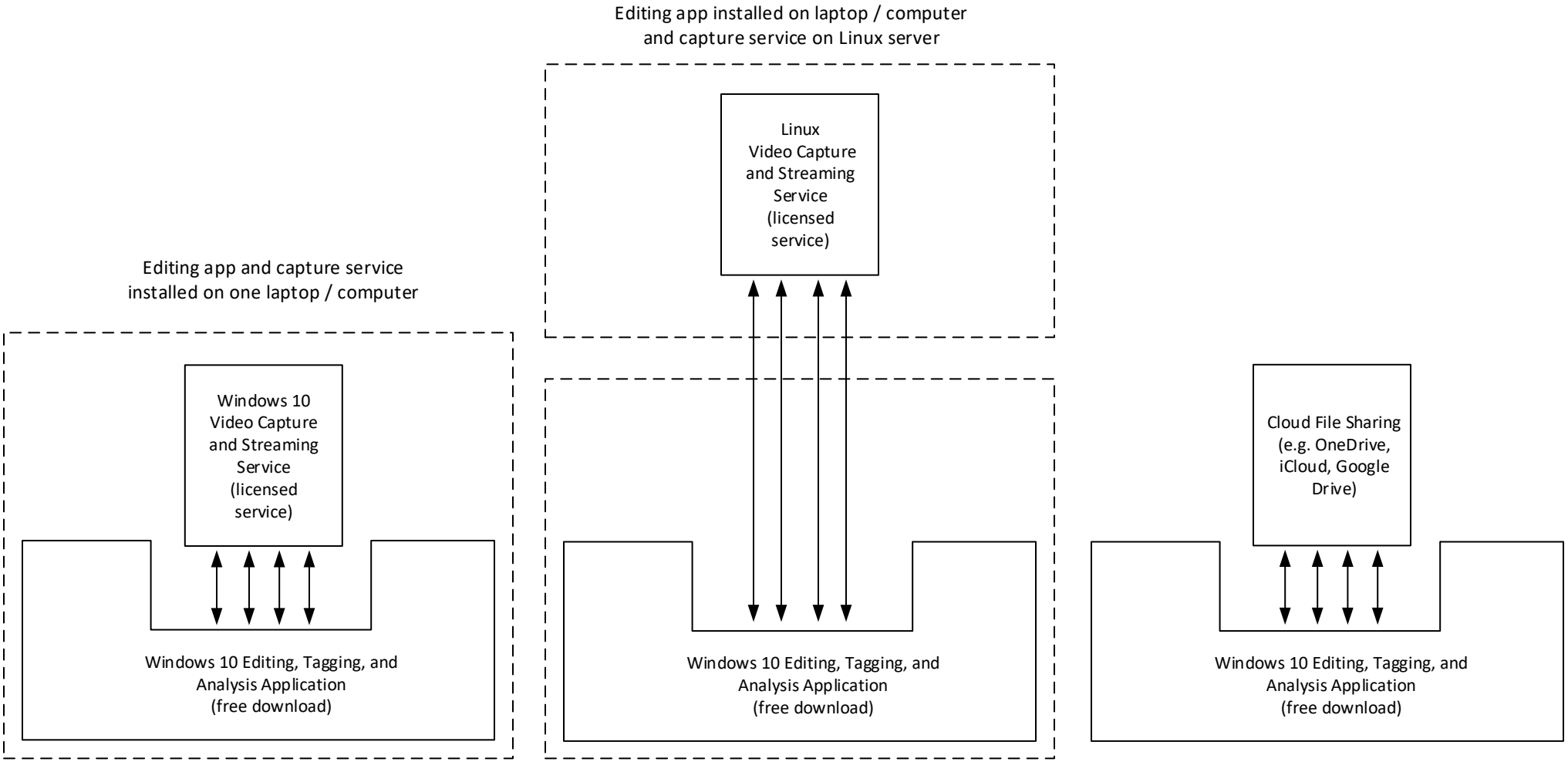

Push Video to RTMP Streaming Networks

One app needs to support 3 different configurations




The Win10 editing / tagging app needs to appear the same to the user for either the Win10 service or the Linux backend options. User can support both backend options from one front end app.

Need a simple way to establish a session with the backend server




*Why do it this way?*

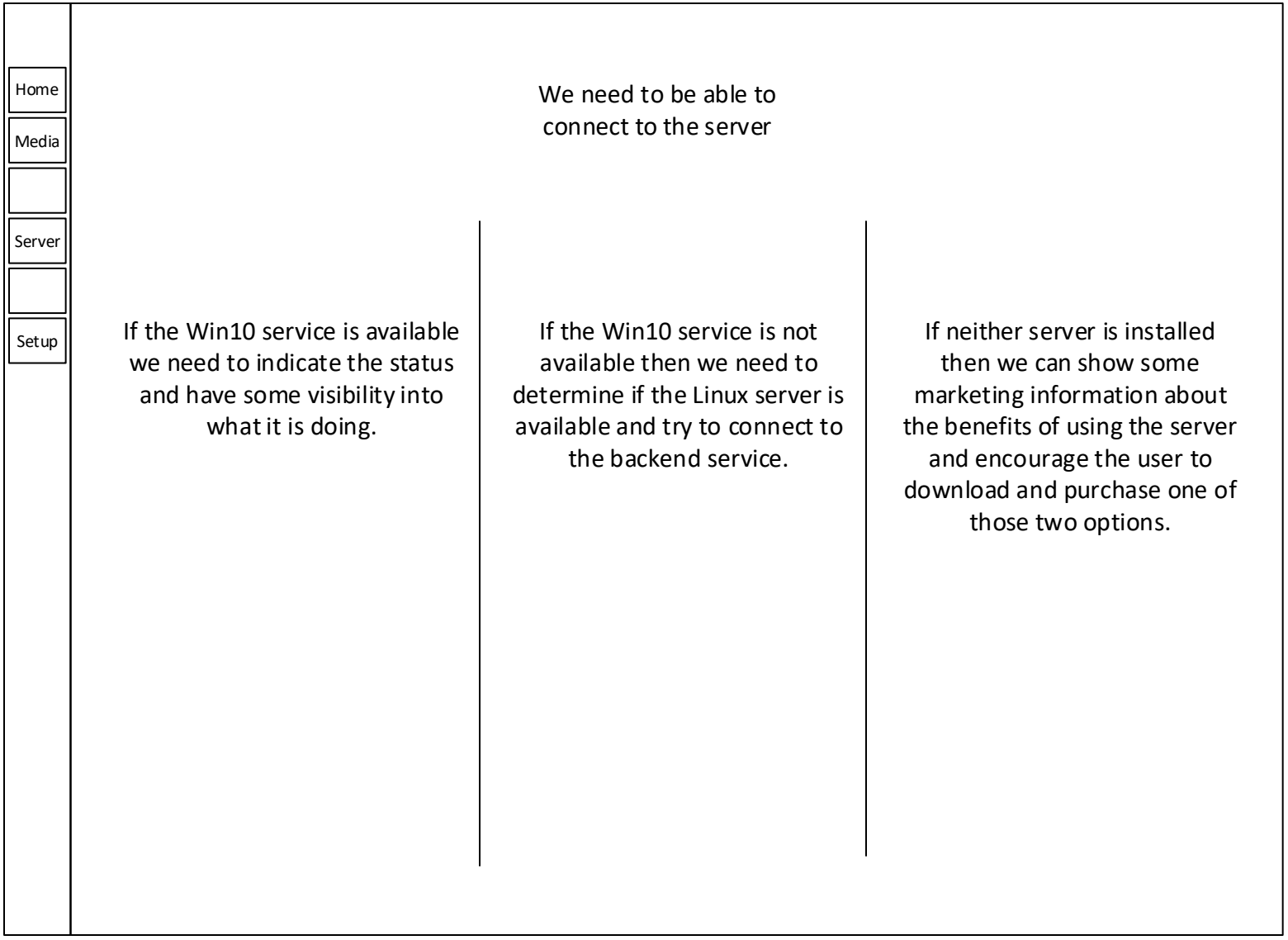
*The Win10 laptop would be used home and away. We need to be able to support both server options. This is one way to do it, there may be others. If so, we should consider them.*

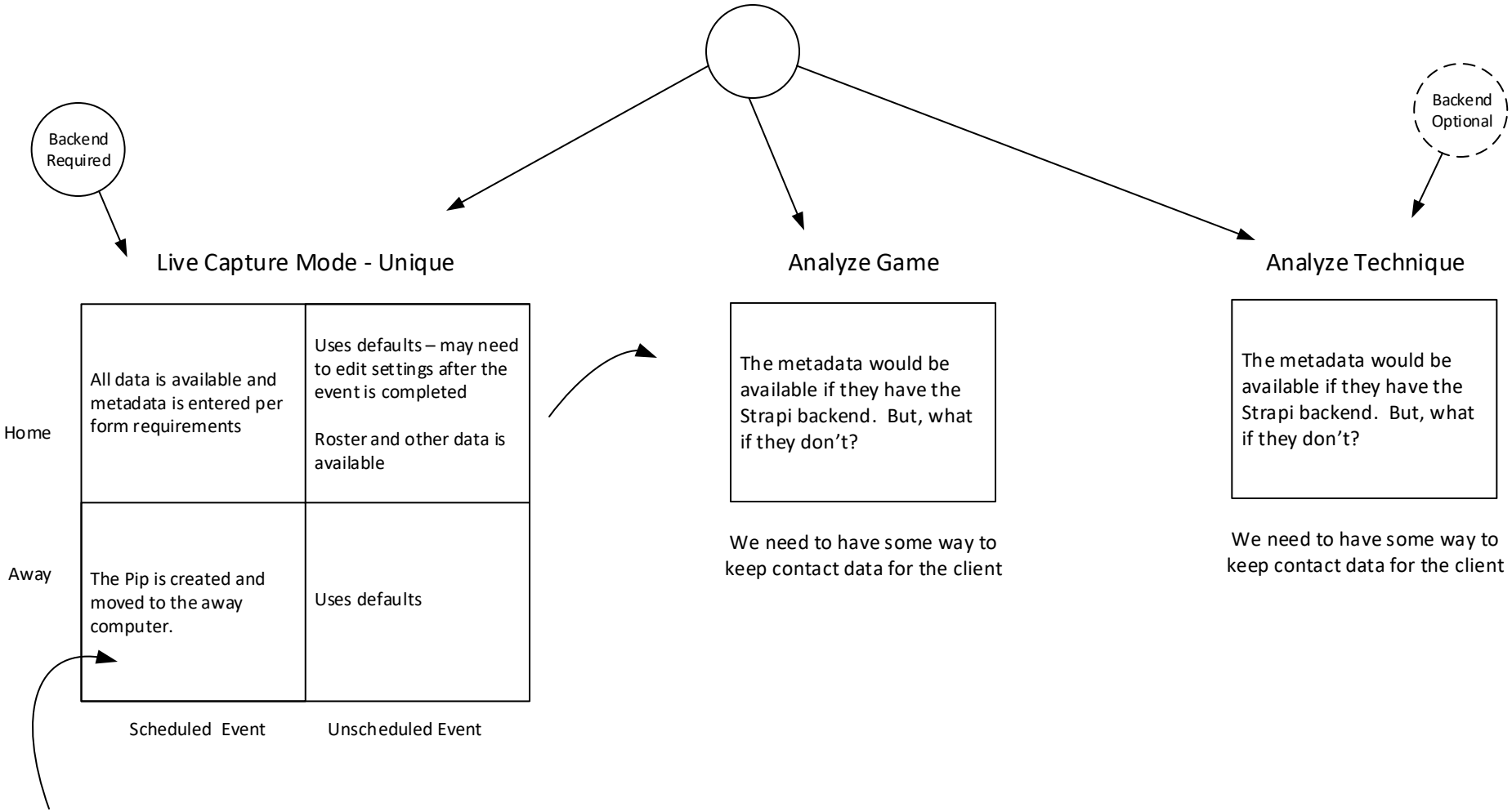
Server Name: Win10 Backend (or Linux Backend)
Address: 127.0.0.1 (or 192.178.1.1)
Session Status: Not Connected

CONNECT

Connect Automatically [X]

# Connection Options to the Backend Systems




Backend Required
Backend Optional
Live Capture Mode - Unique
Analyze Game
Analyze Technique
All data is available and metadata is entered per form requirements
Uses defaults – may need to edit settings after the event is completed
Roster and other data is available
Home
Away
The Pip is created and moved to the away computer.
Uses defaults
Scheduled Event
Unscheduled Event
The metadata would be available if they have the Strapi backend. But, what if they don't?
We need to have some way to keep contact data for the client
The metadata would be available if they have the Strapi backend. But, what if they don't?
We need to have some way to keep contact data for the client
It contains the meta-data
The rules
The roster
The schedule
The resources
And everything else
It could also be sent to the cloud and downloaded anytime before the game starts

We need to have a common look for the Pip list for all 3 levels – on the local computer, in Strapi and on the cloud.

We need to be able to filter by the Strapi categories

We need to be able to search by keyword

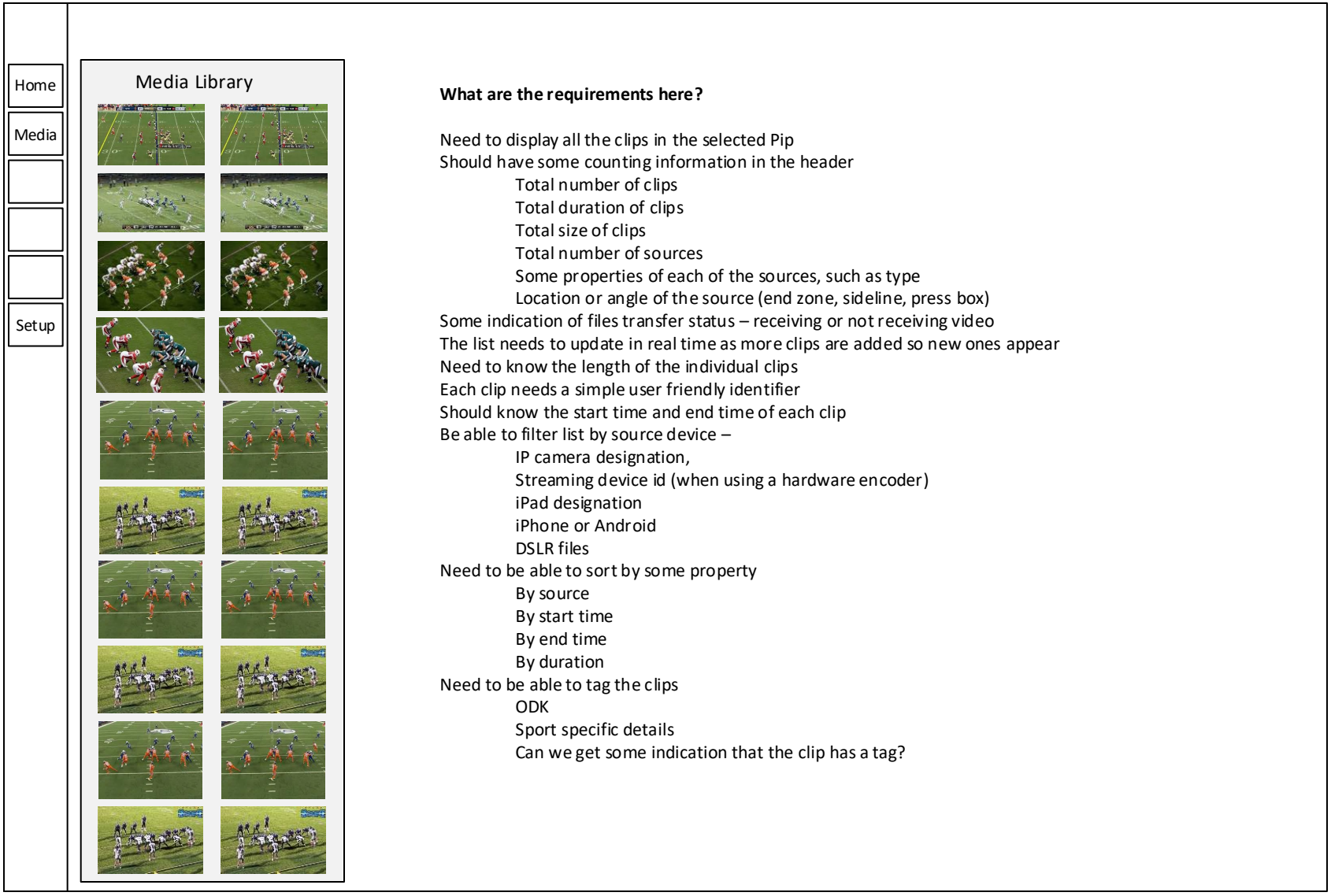

Need to know where the Pip is. Local or remote.

How does this vary depending on Event or Instruction?

Edit Pip – Single View


The Pip will probably have many more video clips that the original app supported. We will need to be able to work with this many efficiently

# Media Library – During a Scheduled Event




**What are the requirements here?**

Need to display all the clips in the selected Pip
Should have some counting information in the header
- Total number of clips
- Total duration of clips
- Total size of clips
- Total number of sources
- Some properties of each of the sources, such as type
- Location or angle of the source (end zone, sideline, press box)

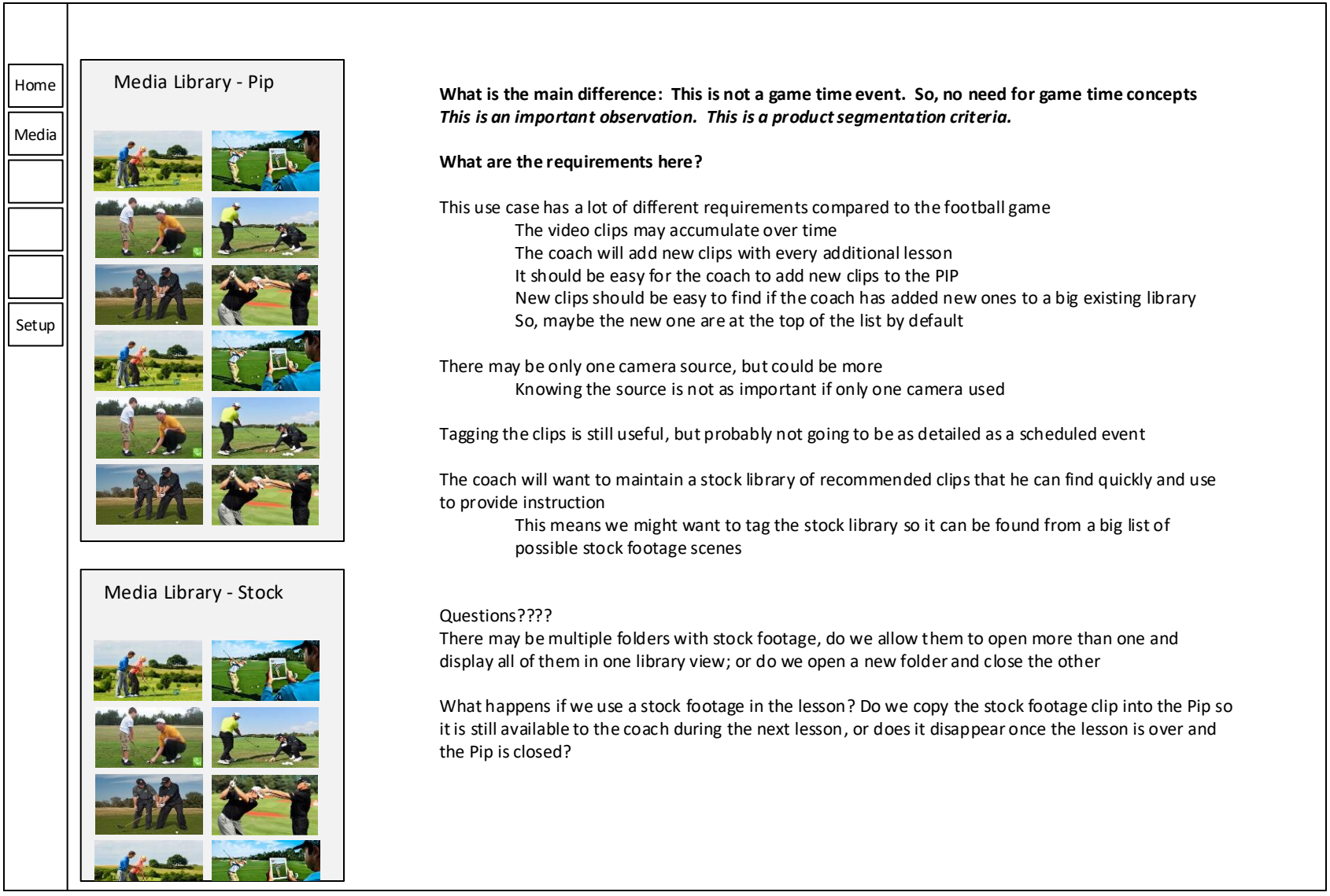
Some indication of files transfer status – receiving or not receiving video
The list needs to update in real time as more clips are added so new ones appear
Need to know the length of the individual clips
Each clip needs a simple user friendly identifier
Should know the start time and end time of each clip
Be able to filter list by source device –
- IP camera designation,
- Streaming device id (when using a hardware encoder)
- iPad designation
- iPhone or Android
- DSLR files

Need to be able to sort by some property
- By source
- By start time
- By end time
- By duration

Need to be able to tag the clips
- ODK
- Sport specific details
- Can we get some indication that the clip has a tag?

*What is the required footage is not in a Pip, need to navigate in an explorer*

Media Library – During a Lesson
(We should probably write up detailed use cases for this scenario)




**What is the main difference: This is not a game time event. So, no need for game time concepts**
***This is an important observation. This is a product segmentation criteria.***

**What are the requirements here?**

This use case has a lot of different requirements compared to the football game
- The video clips may accumulate over time
- The coach will add new clips with every additional lesson
- It should be easy for the coach to add new clips to the PIP
- New clips should be easy to find if the coach has added new ones to a big existing library
- So, maybe the new one are at the top of the list by default

There may be only one camera source, but could be more
- Knowing the source is not as important if only one camera used

Tagging the clips is still useful, but probably not going to be as detailed as a scheduled event

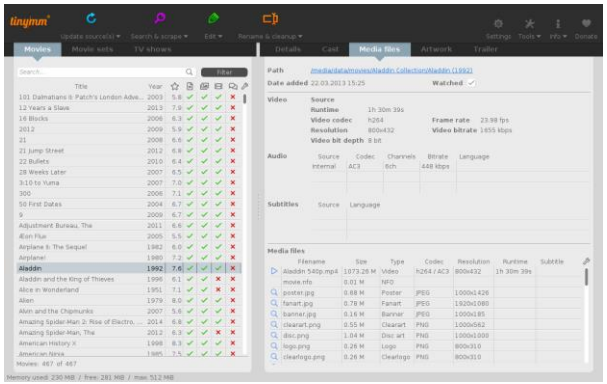
The coach will want to maintain a stock library of recommended clips that he can find quickly and use to provide instruction
- This means we might want to tag the stock library so it can be found from a big list of possible stock footage scenes

Questions????
There may be multiple folders with stock footage, do we allow them to open more than one and display all of them in one library view; or do we open a new folder and close the other

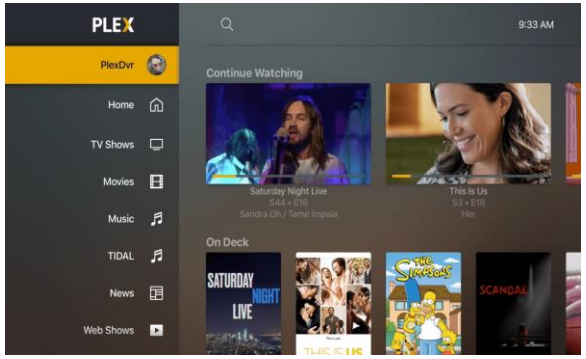
What happens if we use a stock footage in the lesson? Do we copy the stock footage clip into the Pip so it is still available to the coach during the next lesson, or does it disappear once the lesson is over and the Pip is closed?

# Sample Media Libraries Interface

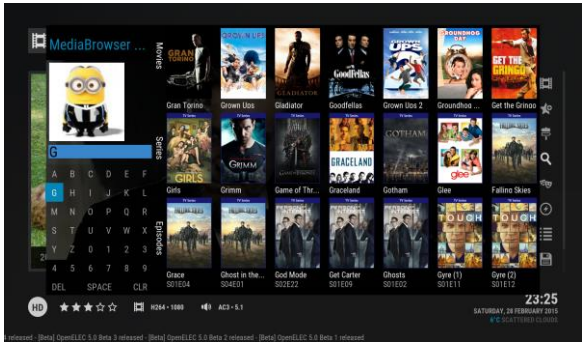
https://www.tinymediamanager.org/screenshots/

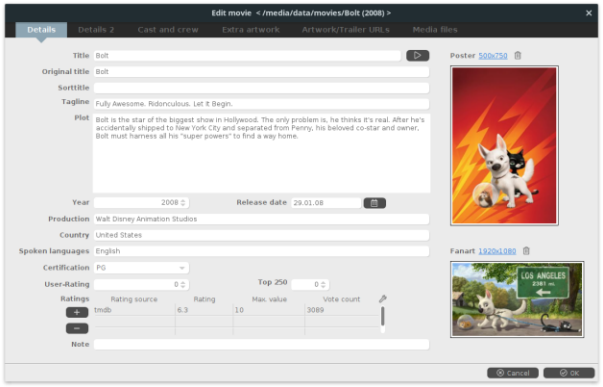


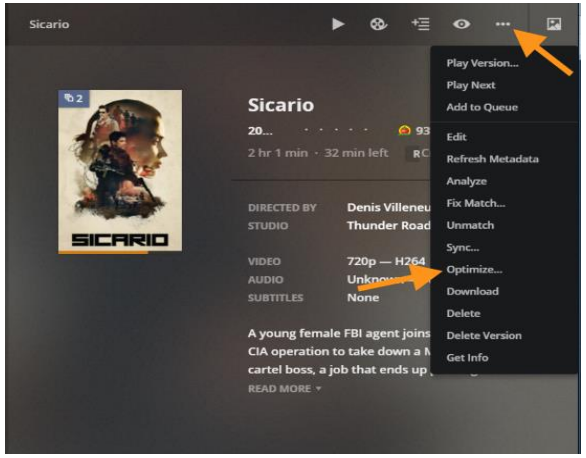
https://www.plex.tv/your-media/movies-tv/




https://emby.media/




This is the format I was considering, but the two at the right are probably more popular with the average consumer who likes the simplicity of the Netflix style UI

Pip with Video and Tagging Data

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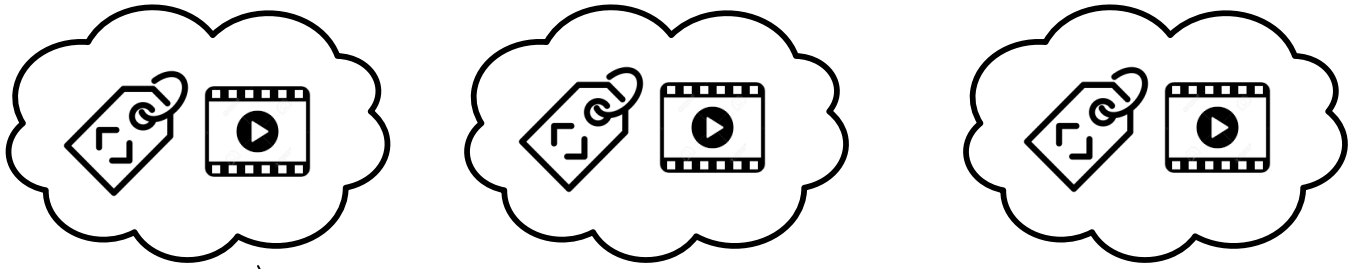
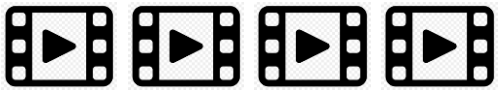
Pip with Video and Tagging Data



| | |
|---|---|
| Show all | “video clips” |
| Where teams are = | “TeamA” vs “TeamB“ |
| And year = | “2019” |
| And sport = | “Football” |
| And play-type = | “Pass” |
| And player = | “Smith” |
| And result = | “Complete” |
| And gain is > than | “20” yards |
| | |
| Search Result = | 4 plays |

*The coach will need to be able to aggregate the metadata and tagging data from more than one Pip*



*Dartfish has a good example of this!*

# Tagging

**Different sports need different tagging data**
The interactivity depends on the sport. Some generate a lot of data, others very little.

**Tagging during the game**
Things happen pretty fast in real time
User can just enter summary data per play
Or can try to add details if they are fast.
This will depend on how much detail or levels the coach wants to collect.

Can have more than one person tagging.

**More than one type of tagging file**
The first example would be tagging plays, but we could also use the tagging file to record instruction, macros and narration like the golf instruction videos we watched.

**Tagging after the game**
Now they have as much time as needed to add all the details they want.

Can still have more than one person tagging
The second person may be interested in different details.

**More than one tagging file**
There may be a reason to have two or more tagging files. One might be for offensive plays and the other for defensive.

Or one may be the team statistics and the other may be a lot of small details used to identify and improve techniques.

# Edit Pip – Dual View

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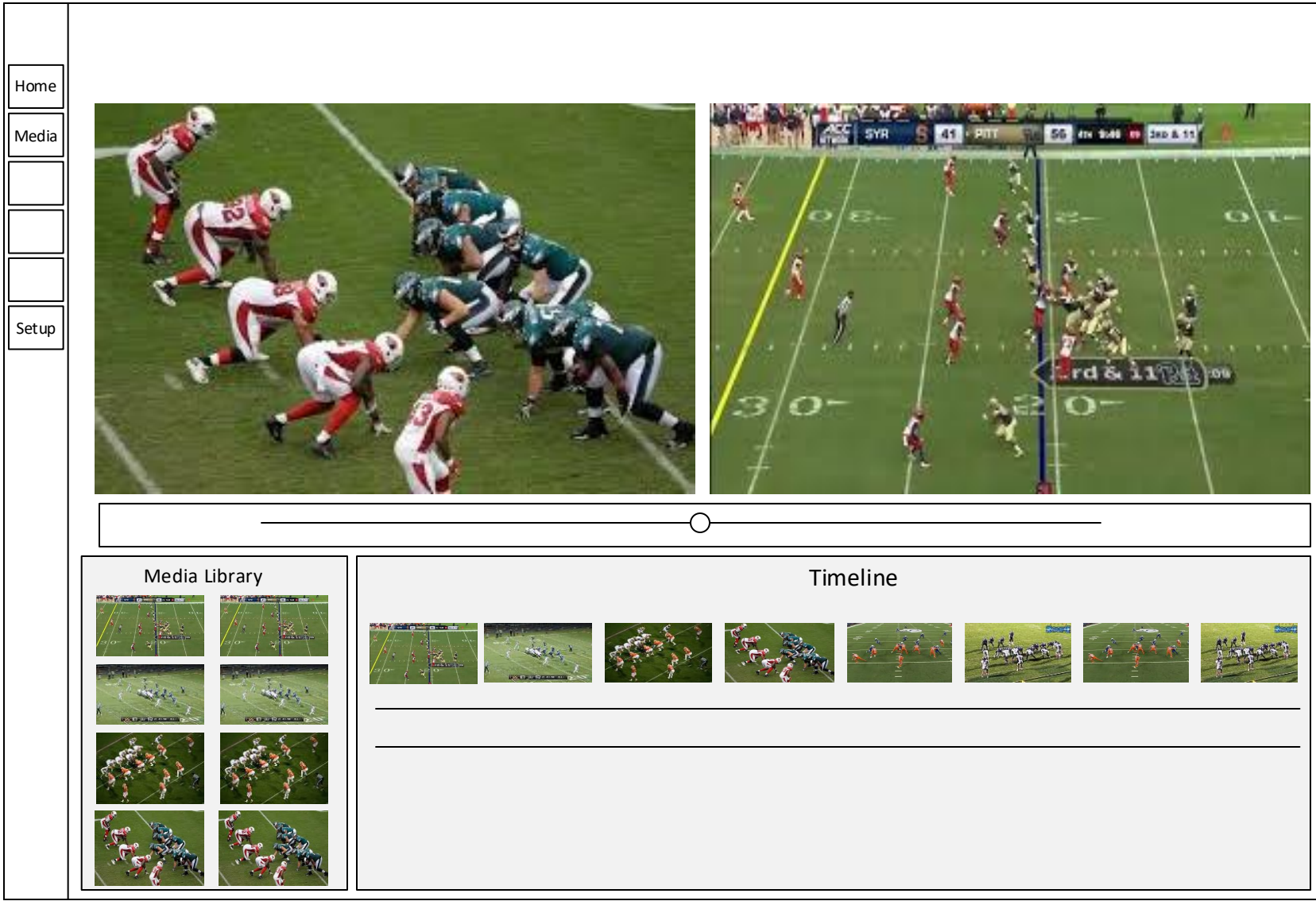
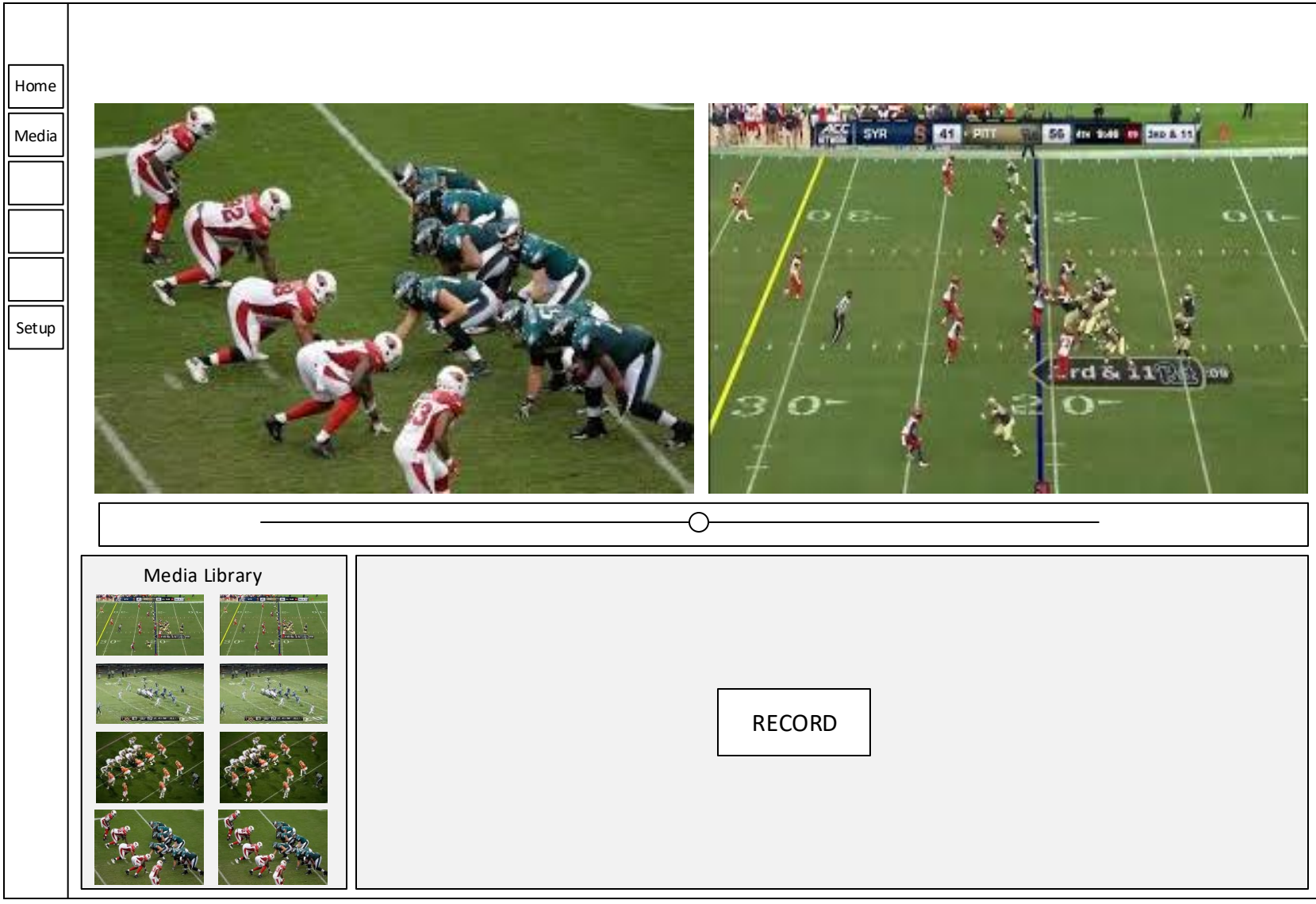
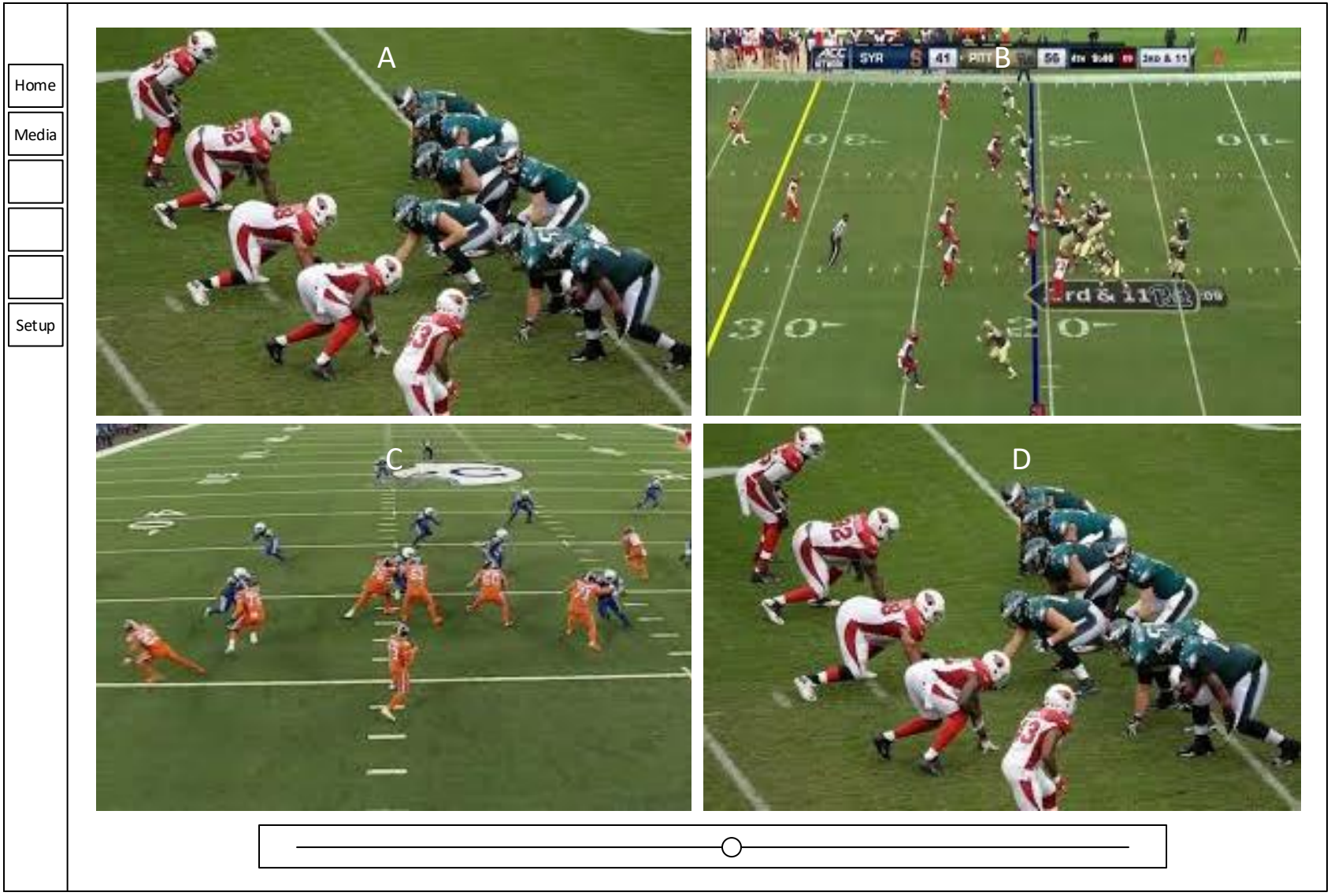


# Edit Pip – Recording



Edit Pip – Quad View



Input Devices - Session Status Recording (want to support up to 8 capture devices at minimum)

| # | User | Location | Device ID | Device Type | Network SSID | Quality | IP Address | Transmit Status |
|---|---|---|---|---|---|---|---|---|
| 1 | Steve | Press Box | A15_9876 | iPhone | Penfield-2.4G | Good | 192.168.1.2 | Sending |
| 2 | Dave | Sideline | B12_7654 | Android | Penfield-2.4G | Good | 192.168.1.3 | Sending |
| 3 | Ira | N End Zone | Cam1 | Camcorder | Penfield-2.4G | Good | 192.168.1.4 | Streaming |
| 4 | Ajay | S End Zone | Hanwha_1 | IP Camera | Penfield-2.4G | Poor | 192.168.1.5 | Lost session |
| 5 | Alan | Stands | HikVision_2 | IP Camera | Penfield-2.4G | Good | 192.168.1.6 | Waiting |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |

This indicates device priority when resources are constrained

Need some type of monitoring to detect issues; cpu throughput; distance from wi-fi; congestion; too many devices; # sessions that can be supported?

Trends over time?

Output Devices - Session Status Playback (want to support up to 10 playback devices at minimum)

| | # | User | Location | Device ID | Device Type | Network | Quality | IP Address | Transmit Status | Received | Retries |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | Coach Smith | Press Box | iPad15 | iPad | Penfield-5.0G | Poor | 192.168.1.10 | Receiving | 22 files | 2 |
| | 2 | Coach Jones | Sideline | iPad22 | iPad | Penfield-5.0G | Good | 192.168.1.11 | Receiving | 22 files | - |
| | 3 | Coach Mills | Sideline | iPad03 | iPad | Penfield-5.0G | Good | 192.168.1.12 | Receiving | 22 files | - |
| | 4 | Coach Choi | Sideline | iPad09 | iPad | Penfield-5.0G | Poor | 192.168.1.13 | Not available | - | 5 |
| | 5 | Coach Velez | Sideline | HP15 | Laptop | Penfield-5.0G | Good | 192.168.1.14 | Receiving | 22 files | - |
| | 6 | Coach Jose | Press Box | Dell13 | Laptop | Penfield-5.0G | - | 192.168.1.15 | No session | - | - |
| | 7 | | | | | | | | | | |
| | 8 | | | | | | | | | | |
| | 9 | | | | | | | | | | |
| | 10 | | | | | | | | | | |

How much ability do we have to place devices on different channels

Home

Media

Server

Setup

0 %

100 %

Color

Brightness

Contrast

HRD

Focus

Zoom

# Streaming Page