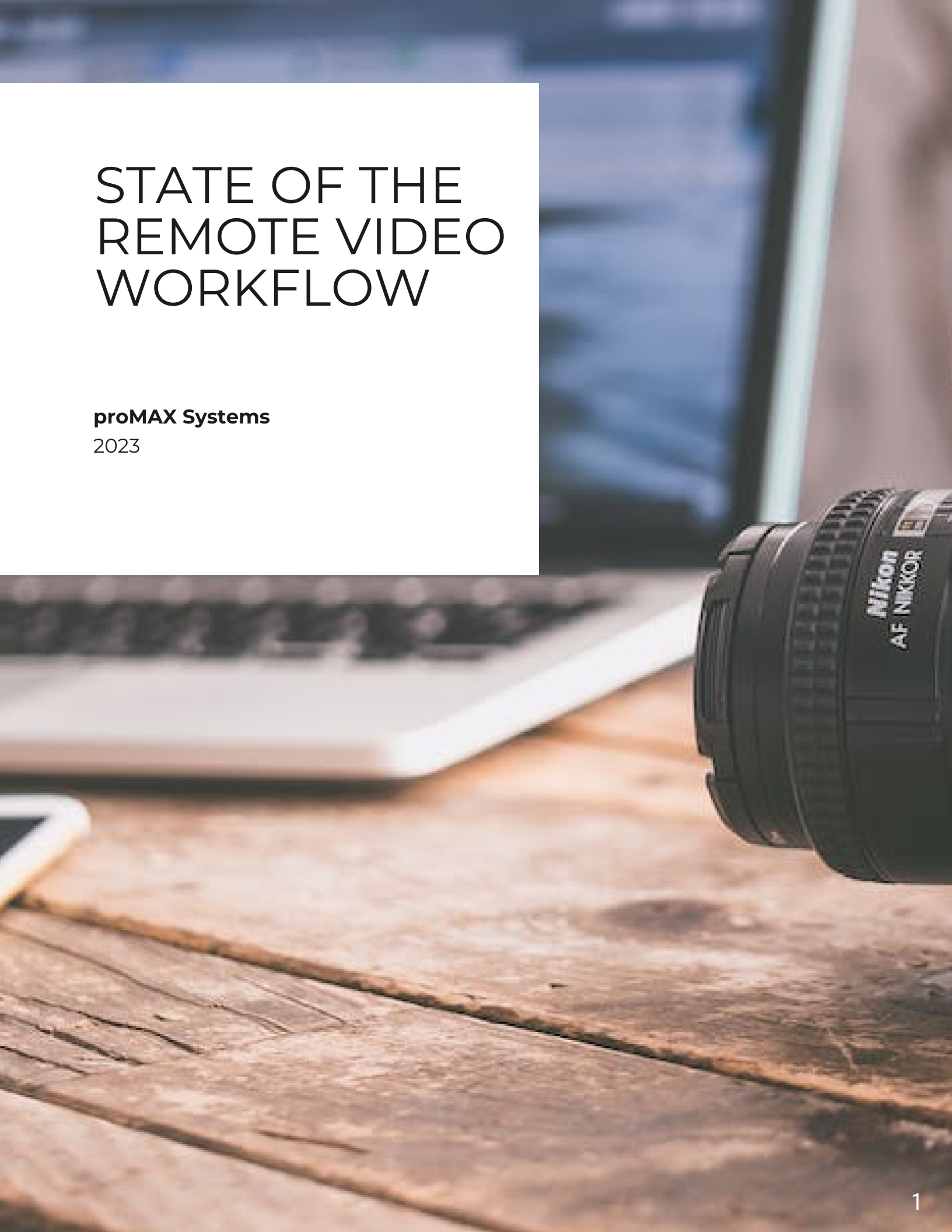
# STATE OF THE REMOTE VIDEO WORKFLOW

**proMAX Systems**
2023



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# State of the Remote Video Workflow

## This is the state of the remote workflow at the end of 2022

Over the last two years, editors and production teams have had to adapt countless ways to get their work done in a remote and now hybrid world.

Even though every team has different needs, workflows, and deliverables, most have settled on a fairly standard set of solutions that usually work for most teams.

Today we discuss five of the most widespread options we see in action: shipping drives, VPNs, the cloud, hardware remote control, and user-to-user sync.

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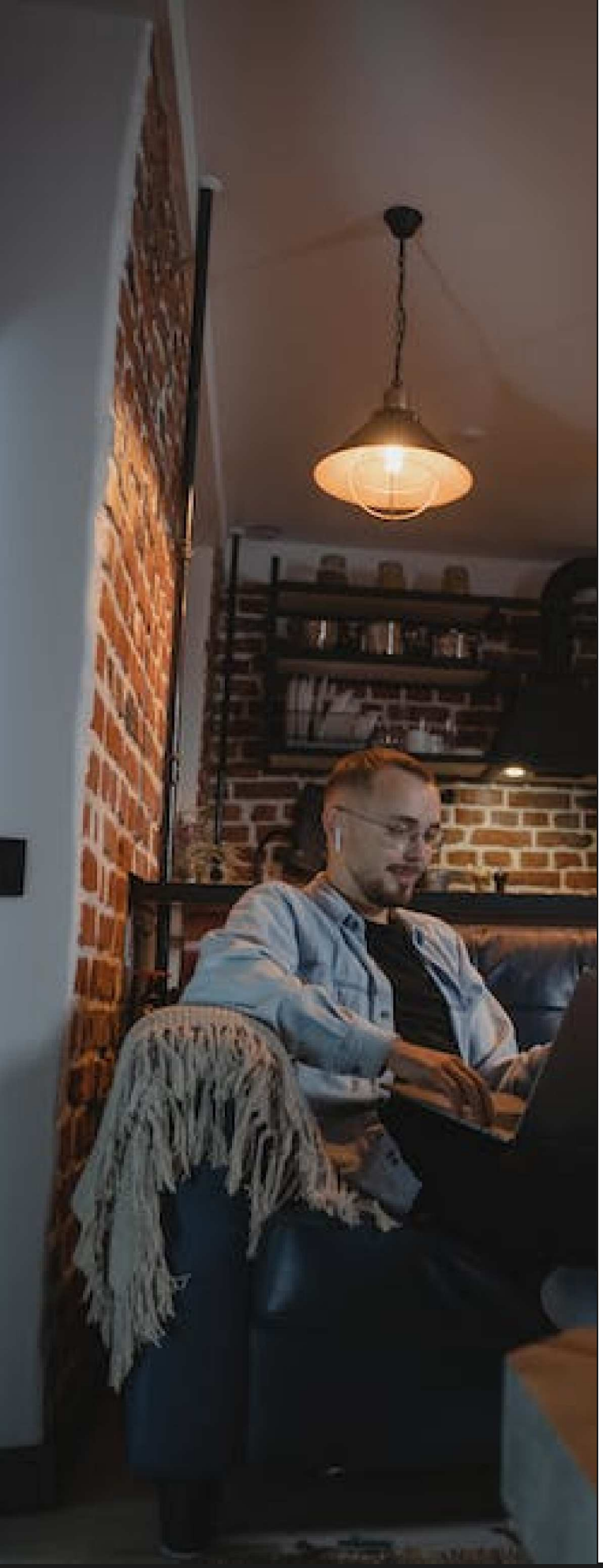


## Key Points:

- The current state of remote video access is not good enough!
- There are 5 approaches to remote video workflows
- Of the 5, user-to-user sync is often the best choice

There are various ways to access video files remotely, and each has its own pros and cons. Shipping drives, for example, is a relatively simple solution but can be expensive and time-consuming.

VPNs can be a more efficient way to access files remotely, but speeds can be unreliable and may only be able to handle large files with timeouts and resets.

Cloud-based solutions are becoming more popular but may be less secure and often don't offer the same performance and long-term cost predictability as a dedicated server.

Hardware remote control installations can be a good option for larger teams but may be more expensive and require more technical expertise to set up and maintain.

Finally, user-to-user sync is a relatively simple solution but requires an upfront hardware cost and some end-user setup, but it has predictable speeds and costs.

# **Option 1:** Shipping Drives

## Shipping Hard Drives

What are the pros and cons of shipping drives around instead of using the internet to transfer data?

The upsides of shipping drives are that it is a “known quantity,” we all understand what we’re getting when we ship or receive a drive, and it is a fast way to get a large amount of data from one place to another.

The downside is that it is relatively expensive, and it can be extremely messy to keep track of all the different drives and the multiple versions of files that un-synced duplication inevitably creates.

**Shipping Drives Key Points**

**Time Consuming and creates an organizational mess**

**Easy and no special training needed**

**Long Data Transfer times and keeping track of projects can be tough**

**Multiple people using different sync software creates problems**

What you need to know is that shipping drives is usually a fallback option when the data set is just too big, or a faster remote option has failed consistently or has difficulty with a particular type of data. It’s typically just one component of a larger workflow and is usually paired up with different cloud options and other solutions.


# **Option 2:** VPNs

## Using a VPN

Moving on to VPNs, a way to connect to a private network remotely.

The upsides of VPNs are that they are secure and allow access to a private (usually corporate) network from remote locations.

However, the downside is that they are slow and unreliable, with file sizes common to video production.

**VPN Key Points**

**Generally Slow and not suited for video files transfer**

**Dropped connections may result in starting over**

**Streaming video content over a VPN is impossible due to speed and latency restrictions**

VPNs can be used for lightweight “push and pull” operations where file sizes are hundreds of megabytes or a few gigabytes. Once you cross into file sizes greater than 2-3GB, stability and speed often work against you. It should be mentioned that some companies invest heavily in Firewall/VPN-related equipment and employ specialists who configure and maintain those networks. This can result in instances where their VPNs can be pretty fast and reliable. However, that is quite rare, and those network investments are typically designed to support hundreds or thousands of standard users vs. even a few video-heavy users.

# **Option 3:** Cloud Storage

## Cloud Storage

Cloud storage is a way to store files on the internet so they can be accessed from anywhere.

Commonly seen implementations of this technology are Dropbox, Google Drive, or Microsoft One drive.

Another more specialized version of cloud storage is known as “object storage” and is built to store data for custom application access.

Lucid link is worth special mention in this category as they are a video-centric cloud object storage service with unique pros and cons.

**Cloud Storage Key Points**

**2 Options for Cloud Storage: Object Storage (Amazon S3 and Backblaze) and application based (Dropbox and Google Drive**

**LucidLink is a interesting mix of the 2 types of Cloud Storage**

**Internet Connection is a defining factor**

**Costs for Cloud Storage can be quite high**

Cloud storage can be simple to use, but most services are not designed for video-sized files, leading to issues with timeouts that require time-consuming restarts of significant transfers. Cloud storage is also quite expensive and unsuitable for storing substantial amounts of data long-term due to reoccurring costs.

# **Option 4:** Remote Control Workflows

## Remote Control Workflows

Remote Control  involves controlling a workstation from a completely different computer using the internet.

Software solutions need to be faster for in a production environment, while hardware-based solutions can be challenging to spec and deploy and are typically quite expensive.

There is no way to completely remove the latency between machines separated by miles of internet infrastructure.

This lag can be frustrating for people who do creative work and are sensitive to the timing and responsiveness of their software.

**Remote Control Workflows Key Points**

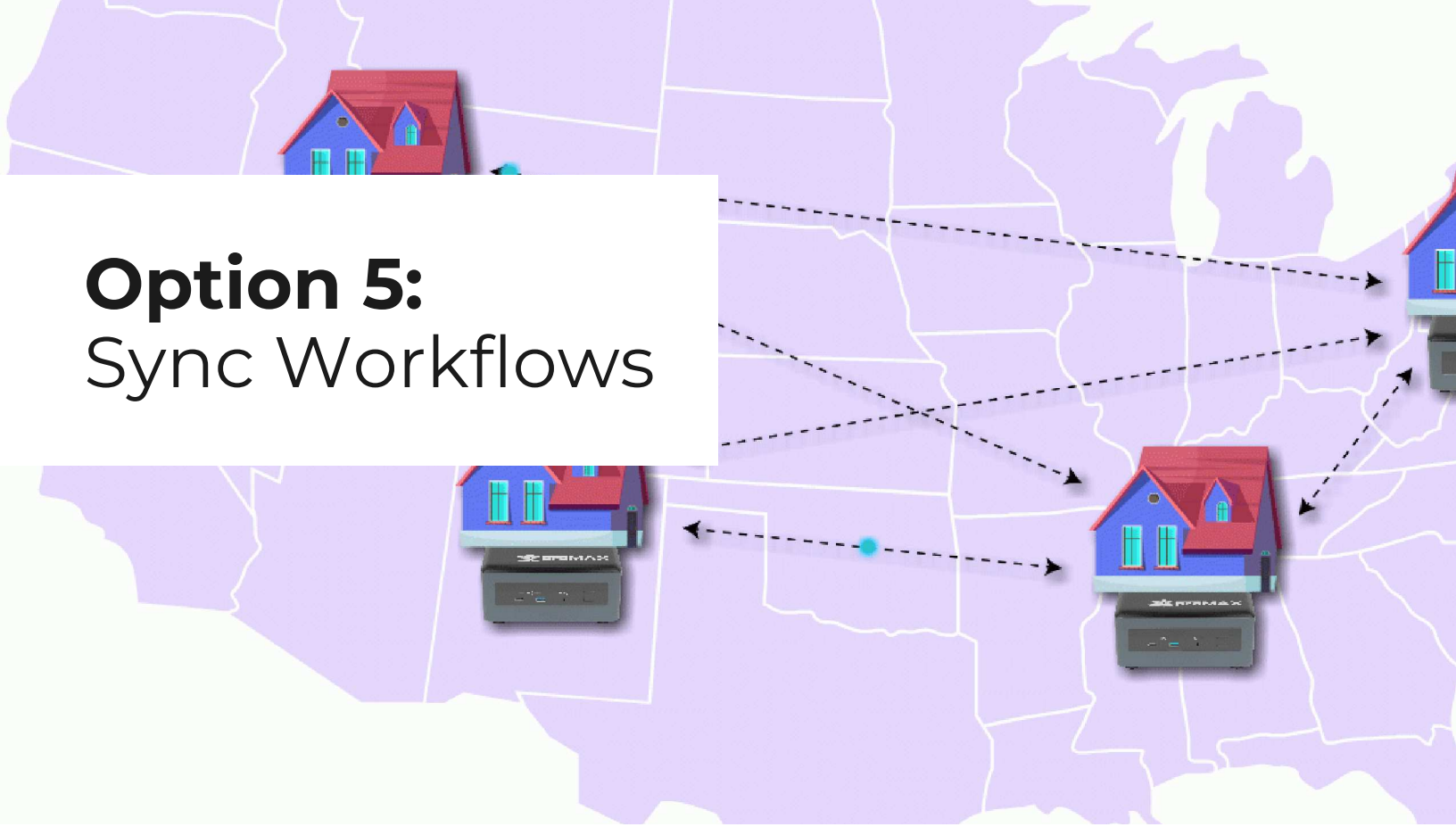
**Complicated setup and not the same as working locally**

**Editors are highly sensitive to lag**

**Expensive to set up and maintain**

Remote control workstations are typically expensive, complicated to set up, and can be laggy compared to a local workstation.

# **Option 5:**
# Sync Workflows



## Sync Workflows

At ProMAX we believe that the best way to sync and manage your data is to use a 'user-to-user sync,' which allows people to share data between them without going through a cloud service.

The benefit is that once the system is set up, it is simple and quick, with predictable costs.

Once set up, users don't need to change their existing workflow as data is replicated into the same folder for each user simultaneously, just like if they were working on a shared drive in an office.

**Sync Workflows Key Points**

- **User-To User Sync is a simple and direct and requires to change to an editor's workflow**
- **All editors see the same version of a file, reducing confusion**
- **Internet quality is very important**
- **No monthly based cost like cloud storage. Costs are predictable and straightforward.**

The most important aspect to know is that sync is a way to share data between users without using a cloud service. This can be beneficial because it is often faster, less complex, and less expensive than using a cloud service.

# Wrap Up

## In Summary

In discussing the state of remote access for video teams, we went over the pros and cons of various remote access methods, including shipping drives, VPNs, cloud options, remote control workstations, and sync options.

We conclude that there is no perfect solution but that a mix of contingencies is often the best approach.

If you want to learn more, go to www.promax.com

**Takeaways**

1. Customers are searching for a remote workflow solution but may need to learn all the complexities, costs, and caveats of moving to the cloud.

2. There is no one-size-fits-all solution for remote workflows - each company needs to find the mix of options that work best for them. Most will use a combination of the methods we discussed to operate successfully.

3. Proxies are a useful tool for speeding up workflows, but they come with their own set of complexities. Most production teams prefer to work with raw media where possible.

4. The state of the remote workflow is complex and constantly changing, making it challenging to keep up with the latest trends.