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FEATURE

BY ANDREW STARKS

## When Servers aren't enough

### How to automate your PEG access station

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PREVIEW

If there's one thing that I've learned when talking to people who run community television channels, it's that they want a video server. Yet

when pressed for the reason why, I find what they're truly looking for is an easier way to work their station's playback.

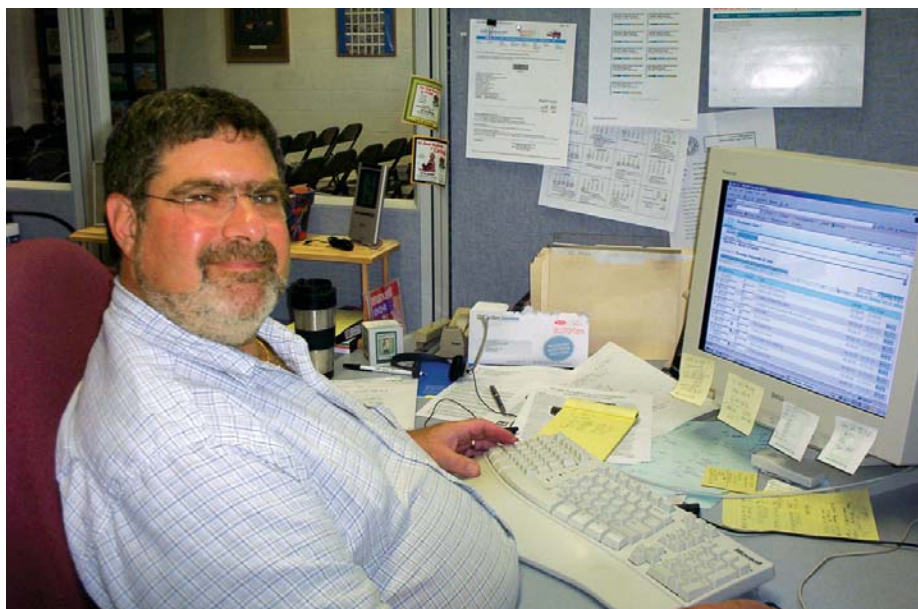
It's true that most video servers play beautiful video, and they all have automatic playback features that play video on a schedule — isn't that what a PEG station requires? Actually, they just don't have the automation power that a station needs, and for that reason, the server itself isn't the place to start when you look to upgrade your playback system.

If you're going to "go digital," there are many questions to ask about your goals, facility, and staff. Start by looking at your station *first* and you will save waste and frustration.

#### Goal Tending

If you're looking for a quick list to get you started, start with your goals. Do you want to save time? Make your channel more reliable? Have better looking video? Play more shows? In short, find out where the pain or desire is that's driving your decision.

What about your facility? Where does your programming come from? Do you control how shows are made and on what media they arrive? How long are your shows? How predictable is your schedule? Where do you publish your programming information? How much programming



*John Goran runs Brunswick Community Television in Maine by himself. While this makes it easy for him to evaluate his needs, it also means that his system needs to provide a great deal of hands-off automation.*

do you need to run every week? What kind of reports and records do you make? Do you need to physically store and track the media?

Finally, think about your staff. How big is it? What's their expertise? Do you have frequent turnover?

If you've got a full compliment of SBE-certified engineers, you probably have different expectations than if you run a three-channel access center by yourself. Understanding the strengths of the staff that will be operating this system is critical to the success of the upgrade. (And be sure you get their input along the way.)

Get a handle on your capabilities and your processes. Before you can get a handle on the

requirements for your playback system, you need to know how your station operates.

#### Decks, DVDs, And More

Your next step is to decide on the types of playback devices and formats that you need to support. Each one has pros and cons — going over their differences will help you decide on the right combination of DVD, servers, and tape.

A very good friend of mine calls DVD a "magic technology." It's dirt cheap, makes an almost perfect archive format, and it looks great on the air. The downsides are that a DVD holds only two hours of video (more if you don't mind MPEG artifacts) and, because it's a consumer format, isn't

well suited for perfectly reliable automation.

The main problem with DVD is the interactivity that over-zealous producers can build into a disc, which can befuddle even the best automation system. Still, if you can exert some control over how your DVDs are made, don't mind the occasional bad burn, and find a tiny bit of slop between programs charming, then DVD is an excellent choice.

You should certainly include DVD capability in your playback system, even if you transfer content to a server. And if direct DVD playback has a place in your head end, make sure that the automation system you pick is compatible with a serial-controlled DVD player. (You need two-way serial control to be sure the programs play properly.)

Low-cost video servers are all the rage in PEG nowadays, and it's easy to understand the trend. Servers are getting cheaper every day, they offer broadcast-like quality, and they can play hundreds of hours of programming back-to-back without operator intervention.

However, what video servers offer in convenience they demand in technical know-how. Don't be surprised if a year after purchasing one you are saying things like, "Yeah, you need to go back and re-render that MPEG because our video server doesn't support long GOPs or AC3 audio." Video servers are computers — and if you're not comfortable around them, you may want to look elsewhere.

Then there's tape. Yes, we all want to get rid of tape, but it's hard to abandon it completely. Sometimes programs come in at the last minute and there's no time to ingest to a server or copy to a DVD. And sometimes it's just too much of a pain to transfer tape-based shoots or old programming. Keeping a few decks around is a smart idea.

While you are evaluating systems, think about whether or not you need to air live broadcasts. If so, be very careful. Many computer-based "automation" systems are designed first as community bulletin boards. They can play graphic slideshows and video files on a schedule, but they don't have the flexibility needed for a station with live programming.

## Scheduling And Beyond

By matching playback formats against your station's workflow, you've made it simpler to pick the right automation system. Now you can focus on the ones that work well with the playback devices you will need. Here are some things to keep in mind while you're tire kicking.

First, you need to look beyond playback. Try to envision your new system installed and think about all of the places that you will need to use your schedule and program library. It's all about the process. My former boss at Bloomington Educational Cable Television in Bloomington, MN, used to say, "Let computers do computer things and people do people things. I should never have to enter the same information twice."

For example, if your station advertises programming on your Web site, in the newspaper, and on your channel's bulletin board, look for ways that you can leverage a database to create all three list-



Shawn Serre, station coordinator for Pittsfield Community Television in Massachusetts, required an automation system that could handle content coming from a variety of sources, including tape, DVDs, and NLEs.

ings and program your head end at the same time. Your automation system should be able to streamline this kind of process, and if it does, it will make you more productive and your station more reliable. If, on the other hand, you have to use a collection of separate systems to manage your station, your technology is working against you.

Next, make sure you get your hands on the software before you buy it. Don't just let a salesperson show you how it works. What looks good in a demonstration may be completely inadequate for your needs.

Finally, think about the expected life of the system you are buying. If it's just a stop-gap until your station grows, then a closed system with everything built in may be a perfect choice. But if you would like the system to change and grow with your station and technology, look at systems that offer separate and upgradeable components. They will probably cost a little more, but they will save you money in the long run. Better still, they won't require retraining and process changes when new technology comes along.

## Playback Possibilities

Now that you've picked your automation system, it's time to choose specific playback devices. Certain devices may work best with your configuration, and that may weigh heavily on your decision.

If a server is a part of your plans, be sure that you pick one with at least as many outputs as you have channels at your station. One of the best things about video servers is their ability to share content across any output. Make sure you buy one that will handle all of your channels. If you need to add a second server, you'll be stuck copying MPEG files and wasting storage. You might as well be swapping tapes.

Next, go back to the questions that you asked yourself about your station and your processes. For example, if you get most of your program-

ming on DV tape, consider a server that can play DV-25 streams. If you get your programming from video DVDs, buy a server that can ingest those without having to re-encode them.

Also, pay attention to any expansion options that your new server may offer. Two terabytes may seem like a lot now, but it may not be in a couple of years. Be sure that your server has built-in redundancy, so if a hard drive goes down, your channel won't go dark.

A few parting thoughts as you begin your quest for playback nirvana:

First, "fix" your system only as a last resort. Are you a television station or a software development company? Staff turnover and the lack of outside support make home-brewing a mission-critical playback system risky at best.

Get professional help in choosing your system. Make sure you find a good salesperson or consultant that specializes in PEG stations. They have years of valuable experience (and often the ear of manufacturers). In my experience, the success stories always start with advice from this group of people.

Finally, hit the lists. Often, your best resources are the mailing lists, blogs, and forums that other PEG centers visit. Find out what's working for people — and what isn't fulfilling expectations? What is the support like for that automation system? Does your dealer have a good reputation? These questions are best answered by those that have gone before you.

Getting the right automation system can transform your station into something special. It may not be as cool as buying 50 new transitions for your editor, but the effect it can have on your viewers and your time at work is much more profound. ■

Andrew Starks is president and co-founder of Tightrope Media Systems (Booth SU2030), a manufacturer of PEG station automation systems and digital signage systems. Contact him at [andrew@trms.com](mailto:andrew@trms.com).