Note: *The product previously marketed as AJA Diskover Media Edition is now offered directly by Diskover Data as part of its suite of media and data management solutions. All current media solutions are developed, supported, and sold by Diskover Data.*

Roundabout Talks Storage and Data Management in an Era of Ever-Increasing File Sizes

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Virtual production, UltraHD, and high dynamic range (HDR) workflows may be driving the audience experience to new heights, but behind the scenes, they've introduced new challenges for creative facilities and post houses, who must figure out how to store, manage, access, and securely share the massive files that accompany productions of this caliber. Always one step ahead, VP of Technology James Jan, who leads the engineering team at Los Angeles-based post house Roundabout Entertainment, recently spoke with us about how his team addresses these challenges head-on using AJA Diskover Media Edition data management software.

What does Roundabout do?

We're an end-to-end post house specializing in everything from restoration mastering to color correction for popular streaming series. We restore a lot of old films, which means we're dust-busting and color correcting, but we also do post for a ton of streaming content, which requires a lot of IMF (interoperable master format) deliverables and audio dubbing.

Tell us more about your background and role.
I started working in post as a systems administrator for Deluxe 18 years ago, then quickly worked my way through different roles and companies. Today, I'm VP of Technology at Roundabout, where I've been for about seven years now. I'm mostly in charge of engineering IT and IOTC, our digital transfer department. I spend a lot of my time researching new technologies and figuring out how we can use them to make our company even better.

How have you seen technology and workflows evolve in your time with Roundabout?
When I first got to Roundabout, the facility was an audio house that had just opened a color department. It had just begun investing in SANs (storage area networks) and additional security measures because the company's new post work meant it had to adhere to MPA (Motion Picture Association) and TPN (Trusted Partner Network) requirements. I helped with the transition, and we began adopting a slew of technologies for the network, with a focus on security, reliability, and performance.

Since then, storage and network technologies have rapidly advanced as the post industry has moved away from HD toward 4K and even 8K. File sizes have increased alongside adoption of higher resolution workflows, making faster, higher capacity storage systems a necessity for post houses like us today. We started out with spinning disks, then moved to SSDs (solid state drives), and are now looking into NVME (nonvolatile memory express) storage. A majority of our storage is SAN-attached and keeps growing, which comes at a great cost that our engineering team is working hard to try and lower. AI (artificial intelligence) is opening new doors, and it's something we're starting to dip our toes into cautiously as it's still so new.

What storage and media asset management solutions do you use?
As previously mentioned, we use a lot of NAS and SAN storage, and on premises, we use a proprietary distributed file system, like what you see with available cloud solutions. We also use AJA Diskover Media Edition for indexing all our storage and our distributed file system, which cumulatively hold about 30 petabytes of media files.

Tell us more about how you're using AJA Diskover Media Edition and why you chose it.
Storing 30 petabytes of data translates to a massive number of files that we need to be able to manage and find. We use AJA Diskover Media Edition to manage all files and for basic searches. ElasticSearch works on the backend to sift through all 30 petabytes of data, so we can find files within seconds, whereas before, a search might take hours.

Because of stringent security requirements, we can't have clients on the production network, but they often need file access; it's a challenge that Diskover has helped us overcome. With its web interface, those users and our internal team can access a copy of the file without jeopardizing the integrity of the actual file. We're able to do this because the software is highly customizable; we can write proprietary scripts to help users copy and move files, generate proxies, and convert audio files, which we simply couldn't do before. Previously, it required the engineering team to build web GUIs from the ground up, which was time-intensive and didn't include authentication. With Diskover, we can do it quickly and with support for LDAP (Lightweight Directory Access Protocol) authentication to comply with security requirements.

Why is security so important to your facility?
Our post team often handles content that has not yet been released. If a file were to leak, we'd lose the client's trust, which is hard to earn back. That's why it's so important to have our production network

separate from the network that our clients access, so not everyone has direct access to all of the content. When users access the content, we also want to be sure they have the proper authentications. Diskover has been essential to ensuring a secure setup for both types of users.

What kind of scripts have you developed for the software?

One of the first scripts we wrote was for generating proxies. Our production and corporate scheduling teams can select a file and click “generate proxy.” The script then sends the information to our transcode farm, where the proxy is then generated and output. Before Diskover, creating and fulfilling a proxy request took a lot of back-and-forth communication.

How has your new setup changed the way you work?

Searching for media files now is so quick. Even if a file is indexed in a database, we can find it in minutes or even seconds, which has come in handy. When one user needed a file but only knew part of the file contents, she started typing what she knew and saw results pop up nearly instantaneously. I was blown away.

Diskover also features an extensive plugin network, including the Media Info Harvest Plugin, which we use to scan all our files and store the immediate, pertinent info for those files. It’s so helpful because we can search through a file and easily understand its resolution, color space, and all the associated metadata information available for it.

Looking to the future, we’re also looking to adopt a more complicated program that will make it easy for users to just find files on the Xytech Diskover plugin for asset creation. It will help make the workflow simpler and smoother, eliminating a lot of back and forth between Roundabout teams leveraging the platform.

Describe your experience working with AJA Diskover Media Edition.

Diskover is secure, fast, and so easy to use that we can usually get team members up to speed on it after just a ten-minute walk-through of the interface. The Diskover team has been fantastic and is quick to respond to any inquiries; we’re local, so they’ve also visited us on site to guide us through installs or upgrades. The fact that they’re constantly updating the platform with new features is a huge advantage, like the Xytech integration they added last year. There are also regular speed and stability updates; for instance, they added caching into the scanning, which has sped up file scanning and indexing. Every time we upgrade, it adds more value, which I appreciate.

How do you see storage and data management evolving in the future?

With 8K on the horizon, there’s going to be more data, which means storage needs will continue to grow, and facilities like Roundabout will need faster ways to store, access, and manage that data. To this end, AJA Diskover Media Edition will certainly continue to come in handy. Right now, there’s also a lot of industry discussion around AI, and I think it certainly has the potential to impact storage and data management technologies and approaches. Still, when it comes to AI, there are many unknowns, and regulations and guidelines need to be implemented. It seems to be the next big thing, so we’re definitely keeping an eye on it.

About Diskover Data

Diskover transforms unstructured data into curated, high-value assets through fast indexing, enriched metadata, and intelligent automation—including an AI Data Assistant to accelerate insight and action. Designed for hybrid environments, it enables smart data movement, cost optimization, and AI/BI readiness with curated datasets delivered to analytics platforms and data lakehouses via multistream integration. With powerful search, policy-driven workflows, and a flexible plugin ecosystem, Diskover gives organizations full visibility and control across their data estate.

About AJA Video Systems

Since 1993, AJA Video Systems has been a leading manufacturer of cutting-edge technology for the broadcast, cinema, proAV, and post production markets. The company develops a range of flexible baseband and IP video/audio interface and conversion technologies, digital video recording solutions, and color management, streaming, and remote production tools. All AJA products are designed and manufactured at our facilities in Grass Valley, California, and sold through an extensive sales channel of resellers and systems integrators around the world. For further information, please see our website at www.aja.com.

About Roundabout

Roundabout is an independent full-service post-production company. Located in Burbank, Santa Monica and Atlanta, they provide an extensive range of creative and technical services to the film, television and streaming industry. Combining leading technical expertise with top creative talent, they deliver finishing, color, audio, localization, restoration and more—with infrastructure built for 4K, HDR, Dolby Atmos, and evolving delivery standards.

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