Qumulo

Media & Entertainment

Ant Farm Selects Qumulo's Modern Scale-Out Storage to Gain Visibility and Performance Needed to Handle Peak Rendering Loads

Ant Farm, a creative content agency, faced crushing peak design and rendering workloads leading up to major events, particularly the industry's giant E3 convention. As existing legacy storage systems slowed to a crawl, Ant Farm selected Qumulo's modern scale-out storage to get the operational visibility and integrated analytics needed to keep storage performing at scale.

Peak Workloads Require Peak Performance

Ant Farm is a creative agency specializing in award-winning campaigns and content for major motion picture studios, television networks, video game publishers, and consumer brands. One of the first companies to produce video game trailers, the Los Angeles-based firm has spearheaded campaigns for such bestselling game titles as Destiny and Call of Duty, as well as films including Transformers: Age of Extinction, Interstellar, The Wolf of Wall Street and more.

At any given time, you can find Ant Farm's editors and designers working with an array of state-of-the-art post-production systems. That staff relies on a Windows-based computer cluster for rendering, often for large format projects that span massive video canvases – sometimes using Ultra High Definition 4K video.

But that's just the tip of the iceberg. As the gaming industry approaches the annual Electronic Entertainment Expo (E3) convention in June, Ant Farm's workload skyrockets. The company doubles the size of its rendering farm and nearly triples its workforce during this peak season.

Unfortunately, overall performance of their render farm couldn't keep up as their back-end legacy storage system got hammered. "When you have dozens of artists all working off the same storage at the same time, it's a major challenge," explains Sam Frankiel, IT Director for Ant Farm. "Certain volumes would get hit harder as the work shifted toward high-usage projects, and our existing system couldn't handle it."

Under the old set-up, storage was limited to an HP network-attached storage (NAS) unit with one head and eight JBODs (Just a Bunch of Disks) of storage. When the system experienced slowdowns, it was difficult to pinpoint which projects were consuming the most resources. "We'd get calls about performance issues, and from there it was just guesswork," says Frankiel. "The process was basically setting OS counters, watch when people were doing work and try to isolate the problem. There's no way to solve the problem that was easy. At all."

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> IT Director, Ant Farm

Moreover, being restricted in their ability to diagnose issues resulted in a shotgun approach that was extremely time-consuming and disrupted production. "Often, our solution was simply to reboot a single node, or even the entire farm, and hope that fixed the issue," admits Joe Oglesby, Systems Administrator at Ant Farm. If that failed, there wasn't much to be done other than wait for artists to close out a project.

ANTFARM

Solution Overview

- 4 Qumulo QC24 hybrid storage appliances
- 1 Arista 10GbE switch
- NFS, SMB and REST protocols
- Qumulo Care enterprise support

Key Benefits for Ant Farm

- Improves productivity by proactively identifying potential bottlenecks before systems are impacted
- Eliminates downtime with the analytics necessary to troubleshoot help calls in moments
- Increases scalability and elasticity to handle peak performance loads
- Responds to changing business needs through rapid two-week software development and release cycles
- Delivers proactive Qumulo Care support for smooth operation

Such challenges – especially during peak production periods – were untenable. So the company sought a scale-out storage solution to increase capacity and performance, but more importantly, one capable of providing the critical real-time analytics on data usage necessary for better management.

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Qumulo Delivers Unparalleled Innovation in Storage

Ant Farm explored many options to bolster its storage, including flash-based solutions and file acceleration appliances. The company considered such providers as Isilon and NetApp, the latter of which was already being used higher up in Ant Farm's corporate structure. "The pressure was on to go with an 'industry standard' but after looking at pretty much everything, we ultimately went with Qumulo," comments Frankiel.

"Qumulo offers an innovative approach to what people need from storage: the total visibility into what's happening and the data analytics to troubleshoot on a file-by-file or application level. That's something we just hadn't seen from any

other vendor," he explains. "And that really helps the IT team, giving us unparalleled access to everything we need to do."

While the intuitive real-time analytics built directly into the file system allows Ant Farm's IT to quickly understand which projects are putting a strain on capacity or performance, other features also swayed Ant Farm to Qumulo. Among them was the interactive web-based REST API, which promises easy customization of the user interface, and the highly scalable nature of the system, which runs on cost-effective commodity hardware.

"Having history in the storage market is incredibly important, and everyone at Qumulo has that in spades," notes Frankiel. "They've seen the mistakes made and how bloated software has become, and they've clearly gained new insights into how to do things better. That was extremely important to us."

Qumulo's Real-Time Analytics Dramatically Improve Storage Management

Ant Farm's ability to delve into Qumulo's integrated analytics and view real-time data performance on a file, directory or subdirectory level, and by client or by application comes with huge benefits that the company is only just beginning to reap.

"The analytics deliver fantastic business value for us. It allows us to be proactive, generating reports that show when data thresholds are being hit so we can move files around, alleviate burdens on specific nodes, and prevent slowdowns before they even occur," says Frankiel. "And when we do get troubleshooting calls at all hours of the night during our busy season, Qumulo gives us the tools to diagnose and handle it in moments."

"Easily the number one thing that I like about Qumulo is the analytics," echoes Oglesby. "We can see data broken down by client and even

file path, so we can drill down and see which IP address is accessing which file and what kind of IOPS we're getting on that project. We can tell if a person needs to close a file or a certain render node is stuck and causing a slowdown."

And, Ant Farm has also been impressed with Qumulo's "two-week sprint" software development and release cycles, which rapidly incorporate customer feedback and software changes. "You don't get excited by 12 to 18-month 'dot-five' release cycles," comments Frankiel. "But Qumulo's ability to develop so quickly is incredibly beneficial – if there's an issue that we have or a feature that we need, we can see it addressed on a week-by-week basis."

The dedicated Qumulo Care enterprise support has also made a big difference in keeping operations running smoothly.

"Our experience with Qumulo Care has been fantastic, it's actually a lot more proactive than our internal warning systems," says Frankiel. For example, when Ant Farm recently suffered an Internet outage, the company received notification from Qumulo within minutes, long before the ISP alerted customers of its own service disruption.

"With a lot of larger companies, you may get responsive support, but you don't feel like your input is taken at all," he concludes. "That's one of the things we love about working with Qumulo – at every step of the way the company really makes us feel like our viewpoints as a customer are being heard. And listened to."

Ant Farm is a creative agency renowned for being a leading, full-service entertainment marketing and advertising agency whose primary focus is to craft compelling campaigns that provide each brand with its own story and unique voice. Ant Farm is comprised of 120 employees who specialize in creating award-winning campaigns and content for major motion picture studios, television networks, video game publishers and consumer brands.

Ant Farm has several divisions under its company banner including: Theatrical, Games, Broadcast, Digital, Design, and Experiential. The creative agency has a strong pedigree in game advertising ranging from "Call of Duty" to other notable franchises such as "Angry Birds," "Assassin's Creed," "Destiny," "Fable," "Far Cry," "Mad Max," and "Watch Dogs."

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