

Customized storage solution from CHESA enriches **Cortina Productions'** innovative museum exhibitions work

Creative museum design and multimedia experience specialists can now efficiently handle enormous media files with an infrastructure that supports continued growth.



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OVERVIEW

Cortina Productions - located in the Washington, DC metro area - designs and produces award-winning multimedia experiences for museums, cultural institutions, visitor centers, and aquariums across the world. From multi-user interactive displays to 4D theaters to AR and VR experiences, the company is always on the forefront of technology to develop innovative avenues for expression.

Given Cortina's rapid growth and the increasingly complex projects it creates, the company was outgrowing its aging and disparate storage systems. It recognized the need for one data storage solution that would make workflows more efficient and archiving more accessible. By partnering with CHESA, Cortina now utilizes a Quantum StorNext SAN as its primary storage, a Quantum LTO tape archive on-site and, ultimately, a cloud backup.

ABOUT CORTINA PRODUCTIONS

Cortina Productions is a full-service creative media design and production company based in McLean, Va. that specializes in the museum field. The company's work, which is focused on telling stories in compelling and innovative ways, ranges from dynamic film and video content to interactive displays and games to immersive AR, MR, and VR environments.

Specializing in a range of cutting-edge technologies, Cortina Productions designs and creates media projects for augmented, mixed, and virtual reality; interactive experiences; film; mobile apps; CGI; and large-format presentations in 4K, 6K, 360-degree, 3D, and 4D.

From the Aquarium of the Pacific in Long Beach, Calif. and the Museum of Science and Industry in Chicago to the International Spy Museum and National Museum of American History in Washington, DC, the company's films and interactive experiences entertain, engage, and inform thousands of people every day.

CORTINA PRODUCTIONS

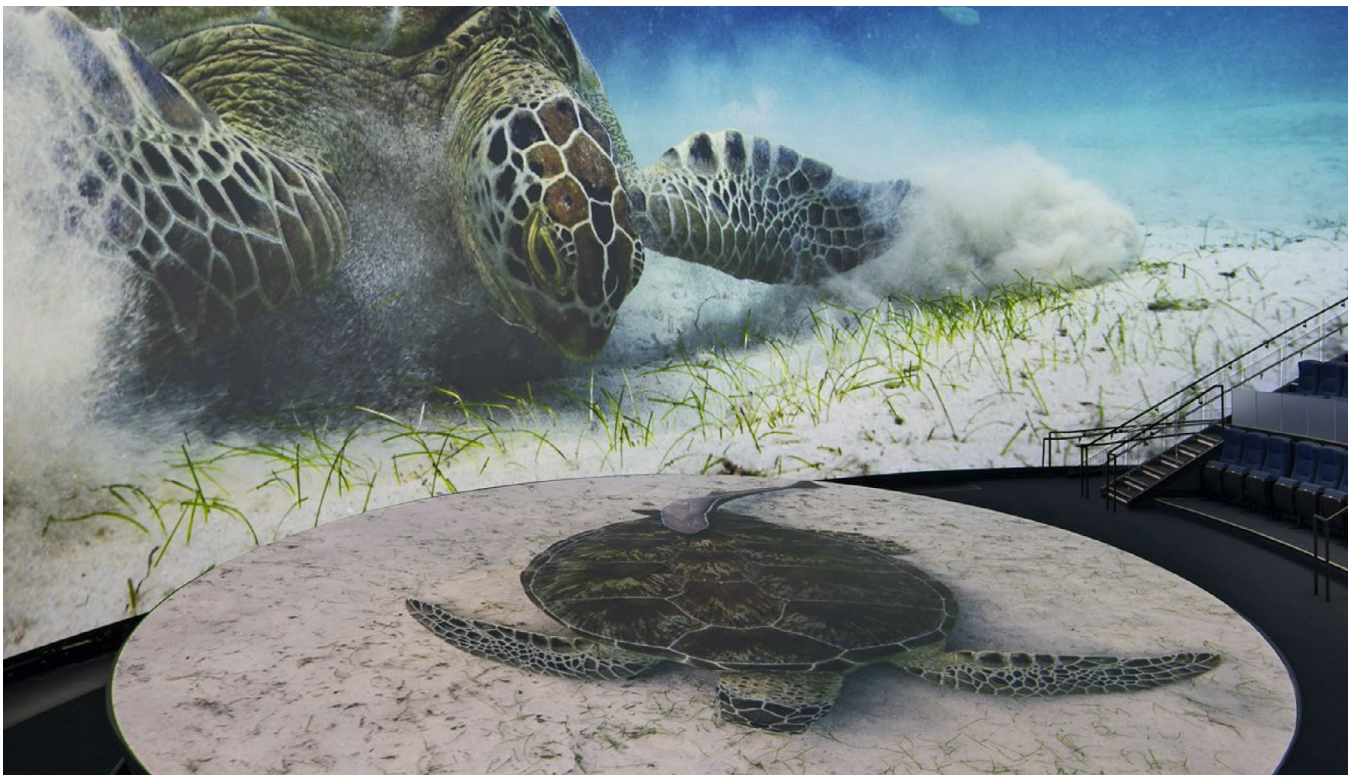


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THE CHALLENGES

Cortina's success has brought new challenges with it. Rapid growth and more complex projects made efficiencies and content accessibility a necessity. Cortina recognized they needed to evolve their infrastructure.

"For a number of years we had a server farm, but every type of work was segmented: designers had one server, programmers had another, editors had their own," says Cortina's Director of Software Development Bryan Heisey. "We had stuff all over the place."

"We were ready to do things differently," adds Senior Editor Nick Spiropoulos. "We were still working the way we did when we had five or six employees, but we had not grown our infrastructure along with our personnel and the scope of our work. We kept tripping over ourselves trying to handle all this data."

Spiropoulos explains that the company's post-production storage consisted of anywhere from one to a dozen external consumer drives. He says that while the teams completed tasks on time -- and they continued to push the resolutions and scale of the productions -- they became increasingly aware that they weren't operating as efficiently as they could.

The team had previously talked to several IT companies that didn't seem to quite understand Cortina's unique workflow needs. "They came from a more traditional office space and didn't grasp the sheer amount of media we deal with, the type of work we do," says Heisey.

“ We kept tripping over ourselves trying to handle all this data.”

- Nick Spiropoulos

Senior Editor

Cortina Productions



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HOW CHESA HELPED

Spiropoulos recalls that some 10 years earlier Cortina had talked to CHESA, but at the time wasn't ready to make the move. "We have a reputation as the go-to company for the experiential, museum, and education markets," he says. "CHESA has a reputation as the go-to company for media production and data storage infrastructure." Cortina's team knew it was time to revisit the idea of a new storage solution from CHESA.

"CHESA made it clear they wanted to understand what our problems were and knew the right questions to ask," says Heisey. "Some of their engineers who helped implement our system had worked in our industry, which gave them a better understanding of what we do as well. All the other solutions proposed before we spoke to CHESA addressed only the short term. No one had suggested the kind of long-term solution they put in place for us."

CHESA's plan for Cortina offered different configuration options, which were thoroughly discussed until both parties agreed upon a three-tier system that was within budget and would help the company excel. With everything in one location, it also gave the team a locus of organization that it was able to adhere to.

The first tier is a Quantum StorNext SAN that forms the foundation of the system, and from which the Cortina team works on a daily basis. Also located in the office, a long-term Quantum LTO tape archive forms the second tier. It interacts with StorNext Storage Manager, which reduces the cost of long-term data retention without sacrificing accessibility. LTO also serves as an emergency backup layer for all incoming footage. The third tier — available to implement when Cortina is ready — is AWS cloud storage with Quantum FlexTier for cost-effective on-demand access. CHESA set up an automated management process for moving data amongst the storage tiers.

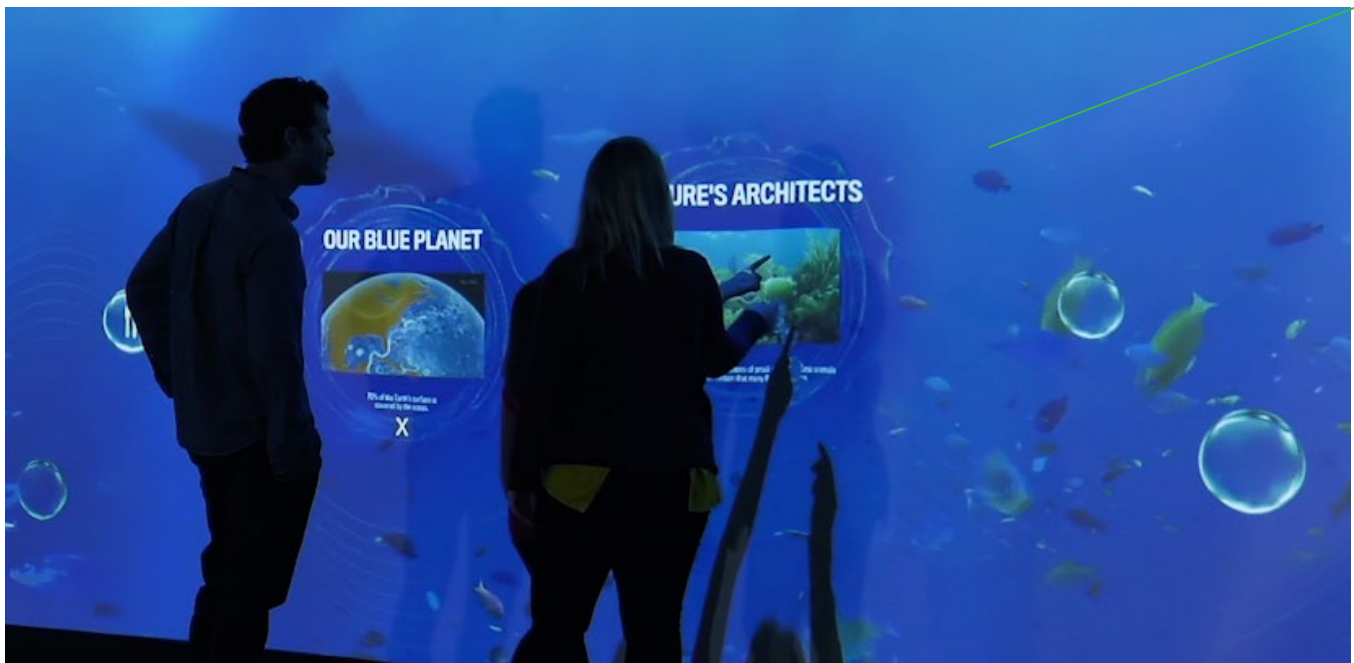


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THE CHESA DIFFERENCE

At Cortina, post-production processes a huge amount of footage, from originally-shot 8K video to 30K produced CGI. The department features eight edit suites running either iMac Pros or Mac Pros with powerful fiber optic 16Gb connections to StorNext. "With the new system in place, we are no longer limited by the way we access storage, and we no longer saturate the bandwidth of the system," says Spiropoulos.

He recalls a 3-day underwater shoot in Hawaii that generated 4TB of RED (REDCODE®) raw footage at 8K. "We ingested it as fast as the hard drives would handle, and transcoded the footage so the producers could screen and review it. I distributed the transcoded material across six computers, which took just a few hours thanks to our beefy computers and very large and very fast storage solution. If we didn't have CHESA's solution, it would have taken perhaps a week; it was nice to be able to turn it around so quickly!"

When the International Spy Museum moved into a new space, it asked Cortina to create new content for exhibits. "We had a very large amount of source material," Spiropoulos adds. "With our StorNext system, post-production went quickly - saving money on the backend of the workflow."

Cortina's software development team still has its own separate server for storage during a project's initial stages, though final projects move onto the StorNext so they're available to the rest of the company, and then archived on the LTO for future access. "That's been big for the programming team," Heisey says. "Before, maintaining all the different solutions and locating a project on many servers impacted our efficiency; it really slowed us down. Finding a completed project that we want to refer to always took time to locate and load onto backup tape. Now, it's fast to recover those files and restore them to the server."

"Our institutional knowledge is stored in those archived files," Spiropoulos emphasizes. "If they're not readily accessible, we've lost that intellectual property."

OUTCOME

By partnering with CHESA, Cortina now utilizes a Quantum StorNext SAN as the foundation of its shared storage, a Quantum LTO tape archive on-site and, ultimately, a cloud storage solution.

The storage solution that CHESA deployed for Cortina has provided a highway for them to grow and change. "Before, we didn't know what road to take at all," says Spiropoulos. "Now, as we need more space, we can add more capacity. We've made sure our connections are so fast that they're the current gold standard for our price tier."

Cortina has also taken advantage of an ongoing Service Level Agreement with CHESA. "If we have any questions about the system, we can use the service agreement portal to contact them, and they'll get back to us right away," Spiropoulos notes. "We never feel like we're on our own."

Cortina also meets with CHESA on a quarterly basis to discuss how the system is working and what updates the team may need. CHESA Account Executive Louise Shideler affirms, "A solid partnership with clients allows us to have our finger on the pulse. This kind of ongoing communication gives our clients the best possible support."

"CHESA has gone above and beyond when it comes to supporting our team," adds Spiropoulos. "They are always available for us, and their team is incredibly smart and dedicated."



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This case study demonstrates how CHESA can equip organizations with a successful, scalable solution and ongoing support that fits your needs.

**Ready to discuss how we can
bolster your organization?**

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