Quantum



CASE STUDY

Studio FAMU Enables State-of-the-Art Film Education with Centralized Storage Built on Quantum StorNext

Studio FAMU offers extensive film production and post-production resources to support a world-class education at the Czech Republic's Film and TV School of the Academy of Performing Arts (FAMU). To provide the data storage required for coursework and film projects from the school's 500 students, the studio implemented a Quantum StorNext solution. The platform delivers scalable, centralized storage with simple, remote access to files. An integrated Quantum tape library allows for long-term preservation of student work.

STUDIO FAMU

FEATURED PRODUCTS



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Ondřej Šejnoha - Director, Studio FAMU

STUDIO FAMU

SOLUTION OVERVIEW

- Quantum StorNext® File System
- Quantum Scalar® i500 tape library
- ELEMENTS Media Library media asset management

KEY BENEFITS

- Made it easier to find files, protect data, and maintain policies with a single, centralized storage environment.
- Scaled to support 450 student projects per year, including a growing number with large 4K files.
- Gained the ability to provide easy remote file access from any location, using a wide variety of devices.
- Improved long-term archiving capabilities, enabling the school to preserve student work indefinitely.
- Streamlined sharing of completed student films with film festivals and others through MAM integration.

Studio FAMU is the official production and R&D facility for FAMU—one of the oldest film schools in the world. In addition to offering students a full range of state-of-the-art production, editing, and post-production tools, Studio FAMU must provide the data storage for numerous class exercises and large-scale film projects produced during the school year. "We support approximately 450 projects every year, which requires a lot of storage," says Ondřej Šejnoha, director of Studio FAMU.

Because those projects increasingly use high-resolution and 4K video formats, Studio FAMU requires a large, scalable storage environment. "Even when students shoot on film, we scan the film in 4K," says Šejnoha. "For post-production, we need to use the best resolution possible."

Beyond supplying sufficient capacity, the studio's storage environment must facilitate easy access to files. Students need to conduct a full range of editing and post-production tasks while professors need simple ways to view and evaluate student work.

LACKING CENTRALIZED STORAGE

Until a few years ago, managing and protecting all of that data was extremely challenging, largely because the studio lacked a centralized storage environment. "We had a variety of separate storage systems and collections of hard drives, and students would just store their projects anywhere," says Šejnoha.

IT administrators were unable to enforce storage policies. "Every student receives a certain amount of storage space when they first enter the school," says Šejnoha. "We needed a way to make sure each student only used what was provided."

The studio also lacked a robust, integrated archive system, which made it difficult to preserve student work over the long term. "Because we are part of a public university, and we are using public money, we must follow strict rules about keeping work," says Šejnoha. Though the studio erases raw data at the end of each year, it must retain final student projects indefinitely.

RENOVATING THE STUDIO, REVAMPING STORAGE

In 2016, when the studio began a major physical renovation project, Šejnoha saw an opportunity to revamp storage. "We wanted to start the new era of this facility with centralized storage," says Šejnoha.

That centralized environment would have to support the entire production and post-production workflow, from ingest through post-production, playout, and archiving. It also had to provide easy access to files, offer scalable capacity for large volumes of high-resolution media, and integrate with an archive solution for long-term preservation of final projects.

In addition, any new storage solution had to work well with a media asset management (MAM) system. Šejnoha wanted a MAM system that would help simplify management and organization of media files while making it easier to share files among students, faculty, and any outside organizations—such as film festivals—that might need to review films.

CENTRALIZING STORAGE WITH QUANTUM STORNEXT

As a department of a public school, Studio FAMU was required to evaluate multiple storage vendors. Fortunately, IT service provider AGORA PLUS understood the studio's unique needs. "They recognized that as an educational institution, our storage requirements might be different than other post-production facilities," says Šejnoha. In particular, the studio needed a system that was simple and flexible enough to accommodate usage from students who were still learning how to manage files and work with media storage.

With assistance from AGORA PLUS, Studio FAMU selected an end-to-end Quantum StorNext solution. The solution includes Quantum StorNext storage plus a Quantum i500 tape library, all powered by the StorNext file system and data management platform. The environment is seamlessly integrated with an ELEMENTS Media Library MAM.

"The Quantum StorNext solution enabled us to centralize our storage, provide easy access to files, and enforce some discipline for the use of storage as part of the creative process," says Šejnoha.

SUPPORTING HUNDREDS OF PROJECTS WITH SCALABLE CAPACITY

The studio deployed a high-capacity environment that could accommodate rising volumes of high-resolution files plus a growing archive. "We developed an initial plan for a 2 PB environment—80 percent for production and 20 percent for archiving," says Šejnoha. "Each student now has sufficient dedicated space on the StorNext system to keep raw materials. Once a project is completed, we archive it to tape."

A few years after the initial installation, the studio was ready to expand further. "We're planning to add capacity for the system, possibly another petabyte or more," says Šejnoha. With StorNext, the studio can expand without ripping and replacing the existing infrastructure.

PROVIDING SIMPLE REMOTE ACCESS TO PROJECTS

By creating a single, centralized storage environment, the StorNext platform helps provide students and faculty easy access to projects. "With StorNext and the integrated MAM system, students can access their work wherever they are—at home or the pub—from any kind of device. They can see files, make changes, and show their work to other people who need to see it," says Šejnoha. "Professors can also view and evaluate work remotely. It's much more convenient than moving around flash drives or external hard drives in a backpack."

Because departments are allotted storage space, professors can share stored course material. "Professors can easily generate a link to films or other coursework and send it to students along with assignments," says Šejnoha.

Students and faculty can access storage from a variety of computer systems and applications. "We support both Windows and Apple Mac systems," says Šejnoha. "And Quantum and

"We've been very happy to have the Quantum solution during this challenging time. With Quantum StorNext, it's very easy to share anything with students, professors, and other organizations—wherever they are in the world."

Ondřej Šejnoha, Director, Studio FAMU

ABOUT STUDIO FAMU

In operation since 1960, Studio FAMU is a specialized unit within the Film and TV School of the Academy of Performing Arts (FAMU) in Prague, Czech Republic. FAMU is the fifth-oldest film school in the world, offering bachelor's and master's degrees to students who come from all over the world. Opened in 1947, the school has helped train numerous renowned, award-winning directors and filmmakers.

Studio FAMU provides a full range of high-end professional production and post-production resources for student coursework and film projects, from camera rentals and sound studio spaces to editing suites and animation workstations. The studio also manages the extensive FAMU film archive, provides film restoration services, and supports an array of conferences, presentations, and workshops.



ELEMENTS work well with all the postproduction applications we provide—there are no problems."

Remote access to work proved to be especially beneficial when the coronavirus pandemic reached Europe. "We've been very happy to have the Quantum solution during this challenging time. With Quantum StorNext, it's very easy to share anything with students, professors, and other organizations—wherever they are in the world," says Šejnoha.

FINDING PROJECTS EASILY

In the past, keeping track of numerous student projects, spread out across multiple storage systems, was extremely challenging. But using a single, centralized StorNext environment in conjunction with an integrated MAM makes it simple to find student projects—even if students leave school for a few years and then return to continue their studies.

"Many students interrupt their studies they might go to another country for a year or two and come back," says Šejnoha. "We have to ensure they can still access their content when they return. Keeping everything in centralized Quantum storage makes it much easier to find student work than searching the shelves for some old hard drives."

PROTECTING DATA AND TEACHING STORAGE DISCIPLINE

Centralizing content helps Studio FAMU protect the projects in which students invest so much of their time. "Instead of relying on portable drives, we keep everything under control, under one roof," says Šejnoha.

At the same time, centralization with StorNext enables Studio FAMU to implement—and enforce—consistent policies. "Storage is a necessary part of the whole production process. Students can't jump over storage," says Šejnoha. "With StorNext, we can make sure students are no longer hiding data somewhere. They learn the importance of proper storage behavior, which they'll need in the real world."

PRESERVING PROJECTS FOR THE LONG TERM

Using a tape archive gives Studio FAMU a scalable, secure means of preserving content. "We park everything on tape for

long-term archive," says Šejnoha. "And with the StorNext platform, it's easy to get content back from tape whenever we need it."

Scalar Extended Data Life Management (EDLM) capabilities help ensure that data remains available for years to come. "We get an alert if data needs to be moved to a new tape, so we can keep all of those projects fresh and error-free," says Šejnoha.

SHOWCASING STUDENT WORK WITH JUST A FEW CLICKS

Attending FAMU is often the first, important step in a career in filmmaking. The new storage environment helps provide the next step by enabling students, faculty, and departments to share student work beyond campus. "If an organization such as a film festival is interested in viewing a film, we can easily generate a link to content on the storage system—we don't have to use messengers to deliver a film somewhere," says Šejnoha. "StorNext and ELEMENTS give us a quick and easy way to share student work with the world."

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Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at www.quantum.com.

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