



FileCatalyst
reinventing file transfer

Rain Network Accelerates Digital Film Distribution onto Global Stage with FileCatalyst

Unlimi-Tech Software offers speed and integrity in digital film distribution while lowering costs ten-fold

First they change, and then they conquer. People at Brazil's Rain Network are changing film distribution across the globe, screen by screen, with the help of FileCatalyst, a software-based file transfer acceleration solution by Ottawa-based Unlimi-Tech Software Inc. Rain Network's goal is to provide digital downloads of independent films to 250 cinemas worldwide by the end of 2007.

Founded in 2002, with its operational launch in 2004, Brazil-based Rain Network interconnects independent cinema theatres in a global digital network. With offices in Sao Paulo, Rio de Janeiro, New York and London, the company transmits films to theatres worldwide in digital format, by broadband lines. By the end of 2004, it was distributing independent films and pre-show advertisements to 25 theatres in Brazil. In 2005, the number of Brazilian screens rose to 80 and the company embarked on a joint venture with New York-based Emerging Pictures to expand its digital cinema network to the United States and England. After three years, Rain Network currently serves 155 theatres.

The biggest challenges? Reliability, acceleration and security

Before using FileCatalyst, Rain Network transmitted digitized movies via an upstream signal to a satellite

service provider. The provider then beamed down a multi-cast signal to movie theatres. The system was reliable, and optimized the time it took to manage the transfers. However, there were three major problems – the high cost of installing a satellite dish at each screen site, the upstream was very slow, and the venues and system were difficult to manage remotely.

In addition, there were other problems associated with file integrity and transmission interruptions. "When transmissions were disrupted, the company had to resend the whole file again," according to Glen DaSilva, a manager at Rain Network. "The system did not allow the resending of only the lost or delayed segment. We could be sending the same 20 GB several times. We're charged by the amount of data we transmit, and a troublesome connection means money down the drain."

Additionally, when setting up distribution to the first handful of screens in the U.S., Rain Network's cost was prohibitive. "The satellite distribution system doesn't work unless the scale makes sense. Until you get over a hundred different multi-point venues or locations to send files to, the returns at the box office wouldn't even cover the connection cost of the satellite network," states DaSilva. The high cost of the satellite distribution system, together

with Rain Network's plan to increase the number of venues and move in a global direction, prompted Fernando Fortes, technical manager at Rain Network's Brazil office, to seek an alternative solution.

Attempting to replace satellite-based distribution with digital subscriber line (DSL) connections and cable, Rain Network tried transmitting compressed digital files. This meant moving from multi-point to single-point transfers, however, and the company soon discovered the lines were unstable and unreliable. In addition, there was a speed problem associated with the limited bandwidth. Even with a 1.5 MB or 3.0 MB download speed, Rain Network could only get a guarantee for 10% of the bandwidth from any one carrier. "It took us up to 10 hours to transfer 20 GB of data in some instances," recounts DaSilva.

Distribution based on broadband lines and managed by FileCatalyst costs nearly 10 times less than satellite distribution

The turning point came when Fortes discovered FileCatalyst, a software solution created by Ottawa-based Unlimi-Tech Software Inc. that offers maximum throughput for large point-to-point file transfer applications. FileCatalyst provided Rain Network with reliability, acceleration and security. FileCatalyst has also made it possible for Rain Network to improve its operations while offering clients a more competitive price.

"After the initial FileCatalyst start-up cost, we pay a monthly ISP fee based on the number of transfers, gigs and a rental storage fee," says Fortes. "Now, with the system managed by FileCatalyst, our ISP costs are ten times less than what they were using the previous satellite system." FileCatalyst smoothed the way for Rain Network in its transition from satellite to DSL. Rain Network also found it easy to integrate FileCatalyst into its KinoCast, a web-based cinema management system.

"FileCatalyst's transmission technology allows Rain Network to use the maximum bandwidth available on a particular connection, keeps the integrity of the file, and cuts the transmission time down to one to two hours," says Fortes. "Furthermore, it allows us to resume a file that has been interrupted by a problem on the line or server. Once the connection is re-established, the transfer then starts at the point at which it was interrupted."

Even though Rain Network has to transfer a vast amount of files to many more places, the user interface helps the company's technical people manage all the transmissions from a central location. "With the previous system," states DaSilva, "if Rain Network didn't think the film would make it to the screen location in time, we would have to put the film on a hard drive and courier it. Now, the operation runs much more smoothly."

Implementation is a customized, two-way process

Implementation of FileCatalyst was a two-way collaborative process, with Unlimi-Tech customizing the software to suit Rain Network's application. According to DaSilva, "Unlimi-Tech was interested in evolving its product based on our needs, so it was a win-win situation for everyone. As a service provider, they were very accommodating. For example, to prevent performance issues on the theatre-end, Unlimi-Tech was able to configure FileCatalyst to automatically compress and send data only during the time when movies are not being shown."

For the theatre operators, the new system makes sense, improving speed and accessibility. As DaSilva describes, "Every screen location has a playout server. If we have a movie booked at theatres A, B and C, Rain Network puts the movie into a folder on the main media server, which is monitored by FileCatalyst's HotFolder application. As soon as the client's playout server looks to the main media distribution server and sees that the file is available in the folder, it initiates the transfer." The added bonus? FileCatalyst's user interface allows Rain Network to easily manage the system remotely.

Increased benefits with FileCatalyst 2.0

The benefits of using FileCatalyst continue to increase. "We just started using FileCatalyst 2.0. which is very reliable and equipped with even more functions than before," says Fortes. "The new version uses less processing power and memory, making it even easier for Rain Network to transfer more files at the same time, without the need for a more powerful media distribution server. We only wish we found FileCatalyst sooner."

For more information

To learn more about FileCatalyst 2.0, please call us toll free at 877.327.9387 or from outside North America at +1.613.667.2439. Visit www.filecatalyst.com for demos, success stories, and more.