CRISPIN INTEGRATION OF MTP™/IP DELIVERS RELIABLE, ACCELERATED CONTENT TRANSFER FOR TV AND MEDIA OPERATORS

A Sony Group Company

> **"** *We have a seamless integration between LoadingDock and MTP, which makes it very straightforward to transfer files from point A to point B. That was our goal and DEI® helped make this possible."*
>
> **– Jim Zagrobelny**
> CTO, Crispin

MTP is easy to integrate, lightweight and provides much-needed control of bandwidth speed and aggression levels.

Overview

Crispin Corporation, a Sony Group Company, provides master control automation and asset management solutions for broadcasters, cable operators and other television and media operations. The company's mission is to assist in bringing a channel to the air by linking all the pieces of television and media operations together in order to run more efficiently. Crispin's solutions – including Media Asset Management, LoadingDock, OTTlink® and more – do this by automating and optimizing workflows and operator tasks for broadcast.

The Crispin team is very sensitive to the high-pressure environment in which television and media operators work. The need to keep stations on the air, without interruption, means the systems must be correct. As a result, the company carefully tailors its solutions to meet master control needs and refines its solutions based on direct experience working with customers to solve real-time issues.

Challenges

One of the most important aspects of managing a media operation is making sure that programs and commercial content are ready to air at the right time, on the right station, in the right format. For example, commercial content can have more than one version and syndicated shows have contractual playback requirements, meaning the system must pick the right one for each station and time. Operators use Crispin's LoadingDock to automatically acquire content, upload content to the cloud, easily prep with proxy clips, designate automated workflows for distribution, and more to fit individual needs. Crispin's LoadingDock is not only scalable from a single station to multi-station or group use, it also enables both manual and automatic transfer and ingest of content.

Because LoadingDock provides group deployment for multiple stations, content file transfer is a critical aspect. Crispin found that files were moving too slowly between station sites, and that problem increased for sites at greater distances. They determined that file transfer acceleration would alleviate this problem and set out to find the right solution.

> ❝ *We've been testing and integrating new features and find that accelerated file transfer is really a lynch pin."*
>
> **– Jim Zagrobelny**
>
> CTO, Crispin

Finding a Solution

According to Crispin's Chief Technology Officer, Jim Zagrobelny, they selected technology from Data Expedition, Inc.® (DEI®) after extensive research and evaluation. It began in 2018 when Crispin tested ExpeDat™ from DEI, putting the accelerated data transfer solution through its paces. The content transfer results were impressive, and the Crispin team moved forward with a proof-of-concept (POC) project using DEI's Multipurpose Transaction Protocol® (MTP™/IP), the transport protocol behind ExpeDat.

The feature set and reliability of DEI technology made Crispin executives feel confident in the decision to integrate MTP/IP. "In our evaluation, we considered the flexibility of the API, ease of integration and deployment costs. The results presented a compelling case to select MTP and our team made the easy decision to integrate the software into LoadingDock," said Zagrobelny.

MTP/IP's "intelligence" automatically adapts to network variability without human guidance and maximizes available bandwidth, while minimizing the time and effort required for data transport itself. Intelligent control is important because while you typically want the software to try harder to hit performance targets, it also needs to consider shared bandwidth.

"Controlling both bandwidth and aggression is very important," Clif Stubbs, a software engineer at Crispin stated.

Zagrobelny and Stubbs both noted that MTP offered the right mix of functionality while remaining "lightweight." While DEI's technology can be used by companies of all sizes, MTP's focus on accelerating the movement of data allows it to be simple yet sophisticated in the way it intelligently and automatically adapts to networks.

Crispin sees varying needs for content transfer across networks, which then require adjustments to how systems are deployed. For example, in a recent pilot project that moves files from coast to coast across the U.S., a Crispin customer began moving to a more centralized distribution model. MTP/IP's flexibility allowed Crispin to tailor the solution by simply adjusting the way it was deployed, especially considering the content itself can also be highly variable. LoadingDock with MTP/IP is called upon to move several terabytes (TB) of content per day, with individual files ranging from as small as 100 MB to as large as 12 GB each.

Because of all this – and "the best customer support you could ask for" – it was easy for the internal Crispin team to reach a consensus to work with DEI and evaluate ways to use MTP to enhance Crispin's offerings for TV and media operators.

With the integration of MTP/IP, LoadingDock is designed to reduce the acquisition workload of station operators by providing direct accelerated transfer between locations. More specifically, MTP/IP adds accelerated file transfers within a station group or "dock to dock." Stations can be set as a 'primary' or 'backup,' allowing the stations to maximize network resources by configuring the system based on individual location needs.

"We have a seamless integration between LoadingDock and MTP, which makes it very straightforward to transfer files from point A to point B. That was our goal and DEI helped make this possible," Zagrobelny said.

Integration Process

Clif Stubbs architected the MTP integration with LoadingDock. He commented that MTP's API was easy to integrate directly into Crispin's LoadingDock, which made working with DEI a simple choice. "MTP is a really good fit for LoadingDock. Integrating MTP was very easy using the static libraries provided by DEI and we're able to offer finer control of the bandwidth speed and aggression levels," commented Stubbs.

During the integration, the Crispin team had an accelerated development schedule to meet customer demands. The MTP API did not slow them down and they were able to meet the tight timeline for delivery with some help from the DEI technical support team to ensure best practices. "DEI provided good documentation and working examples," said Stubbs, adding that "it was not difficult to learn at all."

MTP runs very reliably and offers excellent transparency into the network. When testing and deploying in new environments, this gives important insight into what is happening. "It is easy to troubleshoot," said Stubbs, "I really appreciate stuff like that."

Crispin continues to fill out the features set for the integration of MTP with LoadingDock. The initial MTP integration was done separately on the file transfer aspect of LoadingDock, then it was later fully integrated into the whole product. "Since that time, we've been testing and integrating new features and find that accelerated file transfer is really a lynch pin. We are now using it many more ways than we thought we would," said Zagrobelny.