

Case Study

iNDEMAND Uses Minnetonka AudioTools Server to Automate Audio File Workflows for its Comprehensive Media Processing Platform

How the VOD/PPV distributor automates
40,000+ hours of content per year with
Minnetonka AudioTools Server.

iNDEMAND®



The Players

iNDEMAND distributes premium Video-on-Demand (VOD) and Pay Per View (PPV) entertainment to more than 200 North American TV operators, with a reach of more than 60 million homes. This includes movies, TV shows, events, boxing, wrestling, MMA, and digital out-of-market subscription professional sports packages for MLB, NBA, NHL, and MLS.

Client:
iNDEMAND

Problem:
Thousands of Audio Files
Per Day in Different Formats
Causing Labor-Intensive
and Expensive Workflows

Solution:

- Custom Implementation of Minnetonka AudioTools Server Software
- Audio file workflows that met iNDEMAND's needs
- Automation that allowed them to dramatically increase their capacity
- Intelligence built into each profile for specific application
- Atypical audio profile flagging and alert
- Silent channel alert
- Program and Channel Order identification
- Loudness measurement and reporting
- All without relying on accompanying inconsistent metadata

Result:

Increased workflow efficiency and accuracy, without additional labor costs.

The Problem: Thousands of Files a Day in Various Configurations

That's a lot of entertainment! In fact, iNDEMAND processes more than 120 million content transactions annually—approximately 1,000 files per day—delivering over 40,000 hours of content every year to fill seemingly insatiable subscriber demand.

It's not just the number of files that are staggering; the associated internal audio channel identification and processing workflows required to prepare content for distribution were also unmanageable. iNDEMAND Content, provided by hundreds of vendors, contains a wide variety of program configurations, from silent tracks to tracks with tones to foreign-language tracks to content with non-compliant loudness levels. Once each audio file was identified and analyzed, every program had to be processed to the distributor's specific content file requirements!

Even with the untiring effort of iNDEMAND's highly experienced content management team and engineers, formatting the tremendous number of content files was arduous, time-consuming, and expensive. They used several methods initially to achieve the task, including laboriously inspecting individual files manually to determine the audio configuration. The manual approach posed several issues, especially if the audio configuration was incorrectly identified leading to the output of incorrect files, which then needed to be redone from scratch. This methodology inhibited effective workflows and led to substantial downstream cost inefficiencies.

“The manual approach posed several issues, especially if the audio configuration was incorrectly identified leading to the output of incorrect files...”

The Solution: Minnetonka AudioTools Server Automates It All

Realizing that a manual workflow was unsustainable for the company's growing library of content, Jacob Gragard, iNDEMAND's Director of Engineering, was tasked with finding a solution to streamline this workflow process.



"I consulted with many trusted industry resources researching this, and because of our unique situation, I knew it was going to take more than just an off-the-shelf solution," he says. "What we needed was a technology partner who would be willing and able to customize a solution for our particular application."

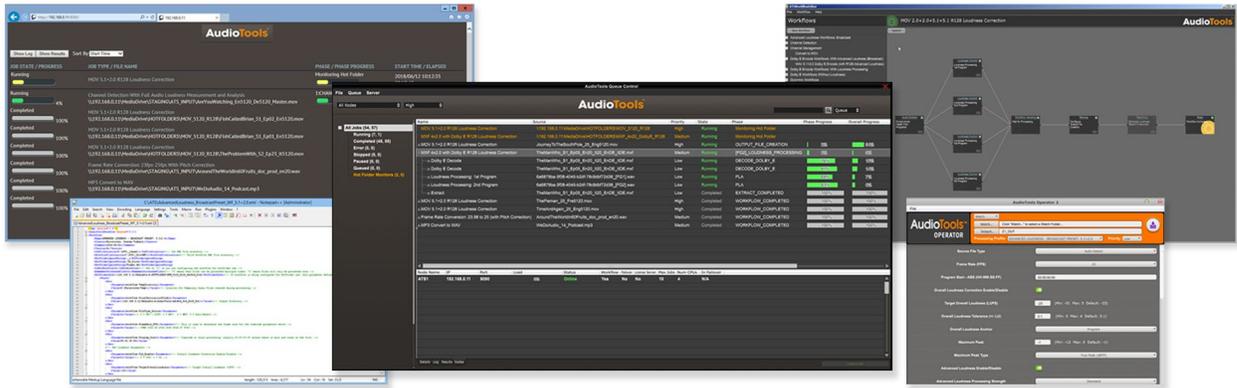
Gragard determined that a custom implementation of Minnetonka AudioTools Server (ATS) provided the best possible solution for iNDEMAND. Minnetonka ATS is an enterprise software system for file-based workflows that is designed to automate even the most sophisticated audio tasks. It's a comprehensive solution for managing and processing linear PCM, Dolby E, Dolby Digital, and Dolby Digital Plus content, as well as the audio essence in MXF, QuickTime, and other clips.

Minnetonka ATS includes loudness measurement and correction; pop, click, and dropout detection; program correlation plus channel detection and validation, modification and correction. It also reconfigures channel assignments as required before content repackaging. More importantly, Minnetonka ATS detects and logs metadata embedded in audio files, which is essential to iNDEMAND's Telestream Vantage media processing platform.

“All of these customized features offer efficiencies not only in cost but in workflows and overall operations.”

According to Gragard, Minnetonka ATS had added value for iNDEMAND because Minnetonka software engineers were able to custom-design audio file workflows that met his specific needs across the iNDEMAND platform.

With the implementation of Minnetonka ATS, iNDEMAND's engineers pared-down approximately 200 audio profile categories to a more reasonable number, and built intelligence into each profile for its specific application. This intelligence greatly increased workflow efficiency and accuracy by analyzing the audio, performing channel identification, determining loudness levels for dialogue and more, all without relying upon accompanying metadata, which was frequently incorrect.



The information generated by Minnetonka ATS is used along with an in-house proprietary database that originates from the program’s audio configuration information, allowing operators to precisely identify each file. For example, if the database material indicates the program has eight tracks, but in reality it has only one track per channel, the proper Minnetonka ATS profile is applied to determine how to correctly feed the transcoder so that it creates the correct derivative output.

This unique hybrid solution includes accommodations for atypical audio profiles where Minnetonka ATS alone cannot confirm a profile. In these instances, an alert is sent to management for further action. Custom features were also created, such as generating a silent channel report and a customized Minnetonka-developed plug-in for seamless integration with iNDEMAND’s Telestream Vantage media processing platform. All of these customized features offer efficiencies not only in cost but in workflows and overall operations.

“They have developed a custom solution for us that is beyond anything I’d imagined.”

Automation for Today and Tomorrow

Minnetonka ATS also presents iNDEMAND with future business opportunities by creating a “clean” file – i.e. one in which all information is known and accurate with all necessary corrections completed and rewrapped with metadata. These clean files can be archived for future use, allowing specific delivery requirements to be immediately met.

“Determining the best implementation in our specific environment, which is relatively unique, required an ongoing, growing partnership,” adds Gragard.



“The outstanding expertise and support of the Minnetonka team at the Telos Alliance have been exceptional. They have developed a custom solution for us that is beyond anything I’d imagined.”

Bottlenecks in your workflows keeping you from expanding and generating higher revenue? Minnetonka ATS will increase your capacity, reduce labor costs by automating processes, and make better use of human resources.

Call us today.

Larry Deeds
+1 (818) 521-7737
larry.deeds@TelosAlliance.com