

Major Performance Upgrade of a Logistics System Handling Huge Volume of Media Data



Problem Statement:

The client is a global sensor OEM catering to multiple industry segments. One such solution related to logistics, where packages were screened, labelled, etc. As part of the solution, several cameras were installed, that captured hi-definition images at high speed. All these images were sent to a central server, Media Server. With terabytes of image data streaming at a high speed, the Media Server was under huge stress: processing, storage and retrieval, running out of space, etc.

Our Solution

Utthunga enhanced the existing Media Server application to meet the customer needs:

- Eased image storage and retrieval. Optimized logic to handle old images and to reduce image quality without impacting clarity
- Enabled secure data transfer from camera(s) by implementing secured protocols like SFTP, FTPS, and HTTPS.
- Added support for MySQL.
- Developed FTP client applications to simulate, test and validate the enhanced server functionalities

Challenges:

- Continuous inflow of terabytes of data from smart cameras and several other sensors stressing the Media Server tremendously
- Secure data transfer modes were missing, hence adding to the end-customer anxiety
- The server, built many years ago, only supported SQLite database. The database maintenance and performance were a major challenge.

Benefits:

- Added security in data transfer. Given the diverse scenarios where the logistics solution was used, the lack of security was a consistent source of anxiety for the end-customers as well as the client
- Significantly improved the performance of the Media Server
- The database maintenance and performance was drastically improved: much faster retrieval and storage.