



Application Management Reducing Downtime in the Warranty Claims System: Enhancing File Management

Client: **Fortune 500 - Global Auto OEM- Warranty Claims Application (North America)**



At a Glance

15M+

files in a single flat
directory

7 yrs

of unmanaged file growth
resolved

365-day

automated archive policy
introduced



The Client

The client is a Fortune 500 - Global Auto OEM operating a Warranty Claims Application used by its dealer network across North America to submit, track, and resolve vehicle warranty claims. The application is part of a broader, long-running Application Management Services relationship covering the OEM's dealer- and service-facing systems.



The Business Challenge

Over seven years, the Warranty Claims Application had accumulated more than 15 million files inside a single, flat directory, with no folder structure to organize them by age or relevance. As that directory grew, file access slowed, the system began experiencing

frequent downtime, and IT teams were fielding recurring alerts just to keep the application stable. For an application dealers rely on daily to process warranty claims, that instability was becoming an operational risk, not just a technical inconvenience.



Our Approach

Rather than a disruptive rebuild, we re-architected how the application's files were organized and retained, then migrated the existing 15 million files into that new structure without interrupting dealer access to the live system.

- Designed a new folder structure that organizes files by year and month instead of one flat directory.
- Defined an archival rule to move files older than 365 days out of active storage.
- Executed the migration as a phased batch process to avoid disrupting live claims processing.
- Built a post-migration monitoring plan to confirm stability and catch issues early after go-live.



Solution Overview

In business terms, the fix was simple: stop treating seven years of files as one undifferentiated pile, and give the system a structure it can actually navigate quickly.

Before: Unmanaged Warranty File Growth

Warranty files saved to a single flat directory → 7 years of growth - 15M+ files, no structure → Slow access, frequent system downtime → IT alerts & escalations

After: Structured, Monitored File Management

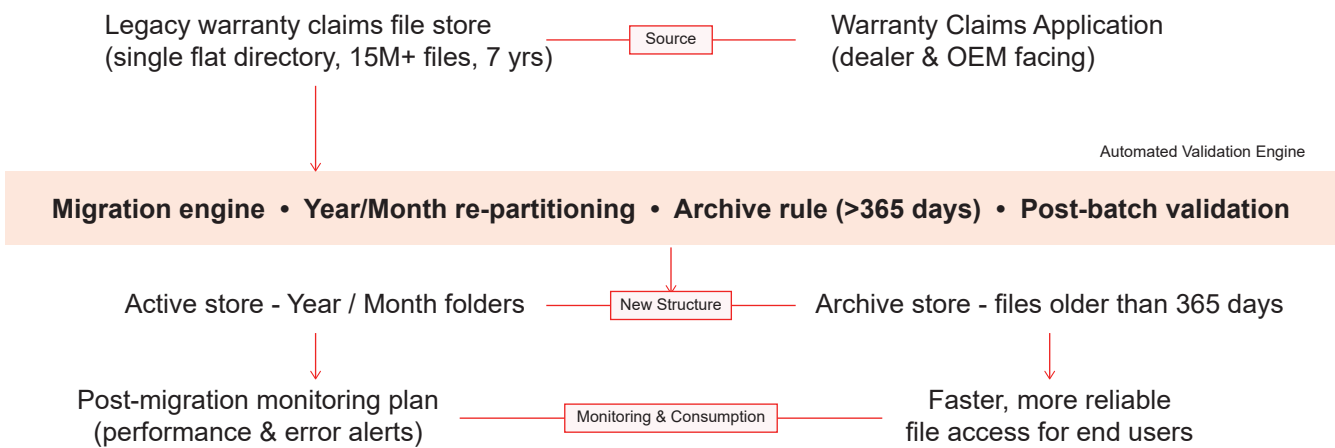
Files reorganized by Year / Month → Files older than 365 days archived automatically → Phased batch migration executed in waves → Faster access, more reliable system



Technical Approach & Architecture

The legacy file store held every warranty-related file for seven years in one flat directory, with no partitioning logic. The migration introduced a Year/Month partitioning scheme for active files and a separate archive rule for anything older than 365 days, executed through a purpose-built batch migration engine so the 15M+ existing files could move in controlled waves rather than a single high-risk cutover. Each batch was validated before the next was run, and a monitoring plan was put in place after go-live to track performance and surface errors early.

Warranty File Management — Migration Architecture



Business Outcomes & Results

Metric	Before	After	Business Impact
File organization	15M+ files in one flat directory, 7 yrs of growth	Structured by Year/ Month; files > 365 days archived	Predictable, fast file retrieval instead of one overloaded directory
System stability	Frequent downtime and IT alerts	Stabilized performance post-migration, with active monitoring	Fewer IT escalations; more dependable claims processing
Storage footprint	All historical files retained indefinitely	Files older than 365 days moved to archive	Lower active storage overhead
User experience	Slow file access frustrating dealers and claims staff	Faster file access	Higher reliability and user satisfaction with the Warranty Claims Application



Why It Matters

This engagement is a reminder that not every reliability problem needs new technology to fix it. Sometimes it needs discipline applied to what's already there. The same pattern (assess unmanaged data growth, introduce structure and retention rules, migrate in controlled phases, monitor after go-live) is directly repeatable for any client running a long-lived enterprise application where files, logs, or records have accumulated for years without a lifecycle policy. It's a low-risk, high-confidence proof point for the Enterprise Applications practice's ongoing AMS work.



Ferfier is a specialist services provider for the mobility and manufacturing industries, integrating deep domain expertise from chip-to-cloud to help OEMs and manufacturers navigate the shift to software-defined mobility and intelligent manufacturing. For more information write to info@ferfier.com