Railinc leverages big data and automation to help keep 1.6MM railcars rolling across 140K miles of track

BUSINESS CHALLENGE
Every day, as trains traverse North America’s 140,000-mile railroad network, they pass intelligent sensors that collect data on railcar movements and health. As the hub for the rail industry’s IT and data services, Railinc receives more than 11 million pieces of data every day—supporting railroads and their customers with essential information to improve safety and optimize operations. As part of its big data initiative, Railinc has implemented Hadoop for storing, processing, and analyzing data captured from disparate devices and databases, and then transforms raw data into business intelligence that helps railroads handle operations. To better meet customer needs, Railinc needed to automate the scheduling of the complex and interdependent processes that move massive volumes of data among critical applications for processing, analysis, and delivery to its rail industry customers.

BMC SOLUTION
Control-M automates and integrates complex big data workflows, delivering data to where it is needed and tracks dependencies to ensure that processes run in the correct sequence. Control-M’s SLA management capabilities alert staff to impending issues, so they can move proactively to ensure that problem remediation happens well before there is an impact on SLAs.

BUSINESS IMPACT
Control-M supports programs like Railinc’s Asset Health Strategic Initiative, which develops tools that enable customers to track equipment usage, identify equipment issues for timely repairs, and safely and efficiently coordinate the movement of millions of railcars.

- Control-M automates the processes that capture and support analysis of data from the more than 40,000 locomotives and 1.6 million railcars traveling across 140,000 miles of track.
- Control-M’s scalability enables the staff to support expected growth in data volume, from 50 terabytes (TB) today to nearly 100 TB in just three years.
- Control-M enables Railinc to maintain data concurrently in two different sites, meeting both business continuity and load-balancing needs.

“The order in which we bring in data and integrate it is key,” says Robert Redd, release engineer. “If we had to orchestrate the interdependencies without a tool like Control-M, we would have to do a lot of custom work, a lot of managing. Control-M makes sure that the applications have all the data they need.”