Manufacturing success within the cloud

Plex looks to game-changing NVMe flash storage to achieve unprecedented scalability, reliability and performance to meet manufacturers’ needs from the shop floor to the top floor.

Business needs

By offering the first cloud solution to handle manufacturers’ enterprise resource planning (ERP) and shop-floor automation, Plex has achieved consistent double-digit growth. With customer demands and data volumes increasing exponentially, Plex required significantly enhanced data access and scalability—plus simplified management—to keep pace.

Solutions at a glance

- Dell EMC PowerMax 8000
- Dell EMC VxBlock System 1000
- Dell EMC Unity 500 Hybrid
- Dell EMC CloudIQ
- Dell EMC Support Services
- Dell EMC Data Domain

Business results

- Significantly improves performance and response times
- Enables better decision-making using real-time data
- Reduces primary storage footprint from 5 cabinets to 1
- Scales efficiently to accommodate double-digit growth
- Streamlines storage management and decreases maintenance burdens
- Automates development and testing, freeing up engineering resources

50% faster response time

5:1 data reduction ratio
The Plex Manufacturing Cloud is a software-as-a-service (SaaS) ERP solution and manufacturing execution system (MES), built to serve discrete and process manufacturers. More than 600 customers with thousands of plants worldwide rely on Plex to process 10 billion transactions a day—driving manufacturing productivity and streamlining operations from the supply chain through product delivery.

To meet rapidly growing customer demands, Plex needed a storage platform that would provide exceptional performance, scalability and reliability—while simplifying management and maintenance. The clear answer is Dell EMC PowerMax.

Restores in

30

minutes

compared to 4 hours

With cloud, the sky’s the limit

Traditional manufacturing ERP software solutions often involve painful, time-consuming implementations and problematic periodic updates. Consequently, many manufacturers go years without upgrades—doing without the latest features and functions to run their businesses.

With the Plex Cloud, new features are added daily and shared instantly with Plex customers. Not surprisingly, the concept has skyrocketed. But Plex’s double-digit growth each quarter for the last 10 years created a new challenge: finding a way to reliably support customers’ 24x7 manufacturing environments.

“Data drives our customers’ businesses,” says Joe Hollewa, senior manager of cloud operations for Plex. “Dell EMC PowerMax is our top-tier, enterprise-grade storage array that all our customer data runs off of.”

50% faster response times to better leverage data

“In manufacturing, data is the new oil,” remarks Stu Johnson, Plex’s director of product marketing. “In the past, it was just used and discarded. Today, with PowerMax, firms can bubble up the data to production leaders, use it for continuous improvement on shop floors and make timely business decisions with real-time analytics and reporting. Data truly provides the capital to run a better business.”

Plex relies on two 122TB PowerMax 8000 arrays to accelerate interactions and enhance the shop-floor experience. With PowerMax, Plex enjoys 50 percent faster response times. “Our SQL database environment is very demanding,” explains Darrel Schueneman, Plex’s manager of cloud operations. “Speed and performance are absolutely critical. PowerMax ensures our environment is performing at its peak.”

PowerMax delivers critical business continuity by handling restores in about 30 minutes, compared to three to five hours in the past. The array is also extremely efficient, thanks to inline deduplication and compression that provides Plex with a data reduction ratio of 5.2 to 1.

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Joe Hollewa
Senior Manager of Cloud Operations
Plex Systems

Reduces costs by
shrinking footprint by

5x
“Over time, PowerMax has reduced our primary storage footprint from five cabinets to one—greatly decreasing our costs,” Schueneman notes.

“Dell EMC PowerMax was also very easy to implement and has proven straightforward to maintain—in contrast to our past Hitachi platform,” comments Hollewa. "Our engineers spend less time on maintenance and more time developing and testing new solutions for the Plex Cloud.”

Running on a full range of Dell technologies

Beyond PowerMax, Plex uses a number of exciting Dell technologies:

• Dell EMC VxBlock System 1000—Enabled building of two remote, active-passive colocations within a matter of weeks, using the turnkey converged systems
• Dell EMC Unity 500 Hybrid—To back up PowerMax and for cold storage/archiving
• Dell EMC CloudIQ—As an “early warning system” that identifies any potential connectivity replication issues, latency concerns or other performance abnormalities before they become critical problems
• Dell EMC Data Domain—Part of the all-in-one VxBlock System, Data Domain delivers critical business continuity and fast times to restore for the Plex Cloud
• Dell EMC Support Services—To accelerate implementation and maximize the value Plex receives from its IT

“With Dell EMC’s help, we deployed two data centers just two months apart,” Schueneman says. “Dell technologies made everything simple for us.”