Major Manufacturer Moves Datacenter 800 Miles without Skipping a Beat

Manufacturing plants are highly synchronized operations. They depend upon a structured, balanced inflow of materials and skilled labor. And these days, information technology is the conductor that's tasked with keeping all of the varied inputs and processes of a manufacturing operation in synch and on schedule.

Any misstep in the intricate management of a manufacturing operation, any mistake or lapse of oversight by the 'IT conductor,' and the whole operation can be thrown into disarray. That's bad news for the manufacturing company, of course. But like a stone tossed onto the serene surface of a pond, any skipped beat in a manufacturing operation can cause problems to ripple worldwide, as supply chain disruptions inconvenience countless customers across the globe.

That's why a major manufacturer was recently viewing their upcoming datacenter migration with considerable trepidation, and more than a little nervous concern.

A Particularly *Challenging* Migration

The migration that was planned was prompted by a merger that required the consolidation of datacenters. The task involved migrating direct attached storage (DAS) AIX, HP-UX, and physical Linux systems to the collocation site where all systems would be utilizing shared storage in a SAN.

But this wasn't going to be a simple, routine migration. This migration presented some special challenges.

The migration required crossing state lines to a service facility 800 miles away. The manufacturing plant ran tight shifts that required systems to be online around the clock; downtime would have to be restricted to a 2-hour window on a Sunday. And the datacenter to be moved was old and obsolete. It didn't have shared resources for storage. No virtualization was in place for any of the systems.

The manufacturing operation's IT team recognized the special challenges involved, and knew that managing the task was outside of their wheelhouse. And it was absolutely imperative that the migration be completed without impacting the delicate synchronization of business manufacturing operations.

So they contacted the only company in the world that specializes *solely* in migration-related services: Data Agility Group (DAG).

A Methodical, Experienced Plan

DAG's team knew that the key to managing challenging migrations revolves around a careful assessment of the job and intricate planning. So they began by conducting a discovery of the existing environment.

The team created a detailed report that painted a portrait of the manufacturer's current system configuration. It wasn't a pretty picture. Several additional challenges were identified: poor bandwidth between the sites; antiquated systems for which technical support was no longer available; no shared storage

environment; and direct-attached JBODs. And the report also revealed that there was a critical shortage of the support resources that would be needed to assist in the migration.

DAG's team also assessed the datacenter's systems to determine which of them could be virtualized. All Linux and Windows systems that were deemed good candidates for virtualization would be migrated to the collocation facility as virtual machines.

A Methodical, Experienced Execution of the Plan

With a thorough understanding of the situation in hand, and with a plan in place, DAG's team went to work.

They began by quickly creating a temporary shared-storage environment. The temporary environment included SAN switches and SAN storage systems, HBAs, fiber cables and Ethernet networking, and was used to facilitate the migration.

Data was captured from the AIX, HP-UX, and physical Linux systems, and replicated to the new datacenter. The majority of the Windows systems, and some Linux systems, were virtualized utilizing DAG's proprietary virtualization gear, and replicated to the Cloud environment at the new MSP.

Testing was then performed on all systems and applications at the new collocation facility. And with a thumbs-up from the testing team, all systems and applications were switched over from the old datacenter to the new.

Manufacturing Mayhem Avoided

This was a migration that had management at the manufacturing facility quite apprehensive. There was plenty of potential for trouble. But DAG's reasoned, methodical approach born of vast experience - the same approach used for *all* DAG migrations - was key to a successful outcome.

All systems were successfully migrated to the new datacenter without *any* downtime outside of the planned maintenance window - that tiny two-hour sliver of time on a Sunday. Performance of the integrated systems and applications at the new datacenter significantly outperformed the old datacenter. Mission-critical services that previously took weeks or months to plan and implement could now be put in place quickly by leveraging the new virtualized environment.

There was no upsetting of the delicate synchronization of manufacturing operations, and no supply chain chaos resulted. In short, this manufacturer's datacenter migration went smooth as clockwork, the way *all* migrations should go.