At a Glance

Company: Aventas Group (formerly Quinn Manufacturing)

Industry: Manufacturing

Customer Profile
With its headquarters located in Derrylin, Co. Fermanagh (Northern Ireland) the privately owned Aventas Group remains one of Ireland's most successful companies. It employs 2,600 staff across Ireland and Europe and operates across cement and concrete products, container glass, radiators and plastics.

Business Challenge

- To upgrade the existing IT infrastructure across four primary data and production centres, which would meet the challenges of 24*7 operations with full resiliency and redundancy
- To design and deliver a highly available platform and a comprehensive disaster recovery (DR) framework for Aventas

Solution

- Designed a DR framework which would meet Aventas' key performance indicators.
- Deployment of latest server and storage infrastructure across four sites, based on a HP technology platform.
- Full reporting transparency on infrastructure through a single console.
- More flexible and responsive maintenance and support service.

Benefits

- A fully resilient IT production environment with automatic failover at each manufacturing site.
- Redundant back office IT infrastructure with the ability to move central administration to an alternative location, quickly and easily.
- Reduced IT carbon footprint thanks to HP's thin provisioning technology with less power consumption and space requirements.
- More flexible and responsive maintenance and support.

HP server and storage upgrade supports round-the-clock production at the Aventas Group

The Aventas Group (formerly Quinn Manufacturing) enjoys robust IT redundancy and resiliency at its major production facilities, thanks to a HP server and storage infrastructure upgrade, designed and deployed by MJ Flood Technology.

The IT refresh delivers robust disaster recovery and high performance server and storage computing for the company's 24 x 7 manufacturing operations and its staff at production plants in Derrylin, Northern Ireland, Newport, Wales and Elton, England.

"Our production systems are now running on a best-in-class HP technology infrastructure," comments Kieran Leonard, chief operating officer with the Aventas Group. "We have a solid production and warehousing environment with complete failover that delivers the reliability, resiliency and predictability that our high-tech, round-the-clock operations demand."

The group manufactures products as diverse as cement, radiators, container glass and plastics. While DR is also provided for all back-office systems to the company's data centre at Servecentric, production and warehousing are the real mission-critical parts of the business.

Zero Tolerance for Downtime
"Our automated production environment demands zero tolerance for downtime," explains Leonard. "If the network goes down, glass literally begins to break at the end of the line. If you buy a bottle of wine in Europe, chances are it was made, filled, packed, stored and distributed from our plant in Elton but our production systems are critical in ensuring predictability of supply," he adds.

Aging hardware coupled with a realisation that the existing infrastructure was no longer fit for purpose, prompted a review of operations. Following a rigorous infrastructure and vendor assessment, the company settled on a HP technology platform for several reasons.

"HP's 3PAR StorServ technology allowed us to deliver more with less and reduce our carbon footprint," according to Leonard. "For example, we can run our production systems on thin-provisioned storage without any impact on performance and with less physical space. We've also been able to consolidate vast quantities of data from the desktop to our data centre without having to massively increase data centre storage capacity," he adds.

Infrastructure Design

Architecture design was based on the principle of delivering a common DR platform for back-office and production, without compromising on the mission-critical nature of the manufacturing environment. Garrett Wallis, lead infrastructure architect with MJ Flood Technology explains:

"Each production site has local high availability. We installed two SANs - HP 3PAR StorServ at each site with automatic failover, so if the network goes down, it switches over to the backup array without human intervention. We've also made some of the production sites failover targets for each other and we're able to use the replication capabilities of the shared 3PAR StorServ environment to do that," he says.

Intrasite replication provides DR for back-office administration and in the event of site loss, the administrative functions of the business can continue to operate as this data is replicated in real-time to the Aventas data centre. Overall, the HP 3PAR StorServ solution provides the flexibility to provide synchronous replication to on-site targets and asynchronous to offsite ones such as Servecentric.

Wallis also made provision for future data growth by deploying storage capacity of between 10 and 30 TB per site, scalable up to hundreds of TB where required.

Reduced IT Administration Overheads

"Our storage environment is now managed from a single console at headquarters in Derrylin," says Leonard. "This 'single pane of glass' approach provides much more transparency into our network performance and greatly reduces IT administration overheads. System alerts allow us to pre-empt any technical issues before they hit production and we've also contracted HP support, for that extra peace of mind.

"Project roll-out was seamless, thanks to the technical expertise and diligence of the MJ Flood Technology team. I'm confident that they will continue to robustly support our manufacturing and business operations for a long time to come."

"Our IT infrastructure is mission-critical. If the network goes down, glass begins to break at the end of the production line."

Kieran Leonard, chief operating officer with the Aventas Group