

## Benefits

- Achieved comprehensive insight into system-wide performance
- Achieved definitive insight and identified major performance issues during early testing, before migration
- Reduced risks of major infrastructure changes through real-time insight into performance implications of change
- Reduced CAPEX through cost avoidance, with provisioning based on detailed performance needs
- Ability to demonstrate performance gains on an application-by-application basis to internal stakeholders
- Storage network optimization through end-to-end insight into performance

**“VirtualWisdom allows you to dig in and understand why applications are behaving as they are, and where potential problems lie...we can make strategic investments based on sound performance information”**

### Simon Close

Head of Storage, WM Morrison Supermarkets PLC

## Reducing the Risks of Storage Migration

### Company Background

This UK-based major supermarket chain has been in business for over 100 years, changing and adapting to meet its customers' needs. Today the company takes a vertically integrated approach to its business, achieving supply chain efficiencies by owning many of the factories that provision its supermarket shelves. The company also grows through acquisition. To support its rapidly changing and evolving business, the company is transforming its IT environment, implementing integrated supply chain solutions and optimizing IT efficiency.

### IT Environment and Role

The supermarket chain runs many of its strategic applications on Oracle Retail and E-Business Suite platforms, with an HPE and Brocade storage environment. To meet its expanding application and data needs, the IT team upgraded the storage infrastructure, migrating from monolithic and modular arrays to HPE 3PAR StoreServ arrays. In addition, they upgraded the SAN with a new fibre optic structured cabling system (from Virtana Partner Splice Group), standardizing on 8Gbps end-to-end Fibre Channel connectivity. Data replication and stretched SANs across data center locations was achieved using new point-to-point dark-fibre circuits with 40GE IP and 320Gbps FC initial bandwidth.

### Business Challenge

This retailer achieves competitive advantage through supply chain efficiencies. Part of its strategy is to integrate across the supply chain; owning farms, manufacturing and distribution centers which supply its retail supermarkets and convenience stores. The supply chain is the heart of this business, and the Oracle software that runs it is truly business-critical. As the company grows, it aims to both optimize supply chain efficiency and to protect it from failures or outages that could cause serious damage to the business. This means achieving a careful balance of business continuity and operational efficiency.



**MORRISON'S**

## IT Challenge

The Oracle applications are vital to business operations, so protecting application performance is critical. The company decided to upgrade its storage network and storage hardware, with replication to another data center for business continuity. Before migrating vital applications to the new storage, the IT team had to convince internal stakeholders that the new environment would deliver the equivalent or better performance than the old one. With more than 600 applications to migrate, this was a significant challenge. During the migration, the team had to definitively identify and proactively fix a number of performance and configuration issues before they affected production systems.

## The Virtana Solution

Morrisons looked to Virtana to provide an agnostic insurance policy which would underpin their storage transformation. By instrumenting the IT infrastructure, they would be able to monitor data traffic passing through it to provide very detailed diagnostic information about application response times and Fibre Channel protocol errors. The IT team made extensive use of the comprehensive, system-wide insight available through VirtualWisdom to baseline performance before, during and after the migration—and also to baseline performance post migration to demonstrate the effectiveness of their storage investment.

**Finding problems early:** During initial pre-deployment testing, VirtualWisdom uncovered several performance and configuration issues with the new storage implementation. With the definitive insight delivered from VirtualWisdom, the team could pinpoint the problems and work with the vendors to address them, before moving forward with the larger storage migration. With its vendor-neutral, comprehensive, system-wide view, VirtualWisdom eliminated the finger-pointing that could otherwise delay rapid root cause analysis and problem resolution, helping minimize deployment delays.

**Performance Verification:** The IT team created VirtualWisdom performance dashboards for a number of their business-critical applications. These enabled the easy creation of performance benchmarks which were

used to establish baselines of pre and post migration metrics. Using the dashboards and baselines the IT team was able to accurately identify any performance or configuration issues before cutover and more critically before they became service impacting. Overall, the Virtana toolsets were used to provide objective evidence that the new IT infrastructure was meeting or exceeding its performance objectives and non-functional requirements.

Ready for the next migration: VirtualWisdom reduces the risks of major migrations and helps them ensure the smooth operation of business-critical applications. Additionally, the retailer can now plan for additional growth and capacity based on definitive performance information, rather than raw volume numbers. According to the company's head of storage, Simon Close, "There's a strong temptation to simply throw hardware at a performance issue, but often that just moves the bottleneck rather than solving the problem. With VirtualWisdom, we can make accurate and strategic investments based on sound performance information."

## Customer Benefits

- Rapid and accurate identification of several performance before the production migration
- Reduced risks of storage migration by closely monitoring performance in real time
- Reduced CAPEX by cost avoidance and capacity planning guided by performance requirements,
- Successful migration of business-critical apps and hundreds of others to new storage environment
- Performance optimization of new environment
- Constant monitoring during migrations, upgrades, and reconfigurations to ensure performance
- Comprehensive visibility into system-wide performance



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