

success story



brewing a reliable IT platform

"Modular, expandable HP StorageWorks systems are ideal for our business plan. The StorageWorks SAN platform is a very cost-effective architecture, which grows with us."

Albert King, IT Manager
Indigo Lighthouse Group

Indigo Lighthouse Group, which provides fulfillment and CRM services to the optical-store market, relies on a flexible HP StorageWorks SAN. HP Services designed, configured and implemented the solution, which includes backup for mission-critical mySAP.com applications running on HP ProLiant servers. "With our HP StorageWorks SAN, it now takes just a few minutes to add new storage when we need it."

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SAN helps optical outsourcing firm focus on the future

In just four years, Glasgow, Scotland-based Indigo Lighthouse Group (ILG) grew from five to more than 250 employees and expanded its operations to mainland Europe and beyond. To a growing number of retail optical chains, ILG offers one-stop shopping for outsource services, including product fulfillment, supply chain and customer relationship management (CRM). ILG manages rapid growth through careful planning and a scalable information-technology (IT) platform, based on products from Hewlett-Packard Company. The IT platform is flexible and powerful enough to handle the young firm's every twist and turn.

ILG clients face an increasingly complex eye-care environment, where multiple administrative and logistical hurdles threaten patient service – including insurance requirements, payment authorizations, collections, inventory control, shipping and patient record management. ILG manages these important customer-service tasks for many of the top European optical chains and more than 300,000 of their patients – a number that grows by nearly 2,500 each week.

To manage this expanding client base and maintain consistently high-service levels, ILG depends on a solid foundation of proven HP solutions, including an HP StorageWorks storage-area network and HP ProLiant servers running the Microsoft® Windows® 2000 operating system and mySAP.com e-business applications.

setting sights on a new IT solution to handle global growth

"In early 2001, we experienced rapid growth, and our plans called for major expansion of our service into Europe and possibly North America," notes ILG's IT Manager Albert King. "At the time, we used a solution from another technology company, which relied solely on direct-attached storage (DAS).

"We wanted best-of-breed solutions, which would support us now and down the road in a flexible, incremental way," King continues. "As a young company with tremendous potential,

we need to watch our IT budget carefully. HP StorageWorks SANs first sparked our interest because we required immediate help with patient-record storage and management. The scalability and reliability of the HP StorageWorks SAN is a great combination for us."

delivering customer-focused services

ILG supports optical retail chains in the United Kingdom, Spain and Holland. Early on, the firm focused on winning the largest optical chains such as Pearle and General Optica. ILG will soon roll out a service aimed at the abundant smaller optical chains, which dominate the European market. ILG expects this new initiative to generate explosive growth. "We can provide smaller, independent chains with a competitive advantage," explains King. "Every client, large or small, expects the same high level of service. Our HP storage solution already proved it can deliver the performance and reliability we need to service all of the new clients and patients we anticipate."

As an outsourcing firm, ILG provides a full range of CRM and supply-chain services, including call-center management, order processing for contact lenses and eye glasses, payment processing for credit cards and checks, warehousing, order fulfillment, shipping, billing and patient-record management. All of ILG's mission-critical applications share cost-effective storage resources on an HP StorageWorks Enterprise Modular Array 12000 (EMA12000) system. The HP StorageWorks EMA12000 system has up to 6TB of capacity, of which ILG uses approximately 1.2TB.

Among ILG's most critical applications is the mySAP.com CRM solution, which runs on a pair of HP ProLiant DL580 servers, along with the Microsoft Windows 2000 Advanced Server operating system. Combined with the HP StorageWorks EMA12000 system, this CRM platform helps ILG seamlessly deliver customer-focused services when and where they are needed most. ILG clients can:

- Determine which customers to attract and retain

"We no longer have to pull data across the network to perform our backups, which isn't an option anymore considering the huge volume of data we now manage, it's all there in the SAN, so backups have no impact on overall system performance. Our staff can just keep working. That's important as we expand the scope of our operations, particularly internationally. We need to be up 24x7, and our HP infrastructure and 24x7 technical support from HP Services makes that possible."

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- Select the products and services that will be attractive to the most profitable customers
- Deliver a higher level of customer service, which keeps customers satisfied and loyal
- Add value to the customer-contact experience – an essential differentiator in today's competitive markets

the SAN vision of centralized records management

The HP StorageWorks SAN stores patient records and prescription updates for contact lens or glasses. ILG serves as an extension of the optician's service, providing a seamless interface between eye-care provider and patient. Opticians can access patient records stored on the HP StorageWorks EMA12000 system through a pair of HP ProLiant DL380 servers running the mySAP.com Enterprise Portals solution.

This mySAP.com application uses a secure Web portal to deliver information and control directly to the optician's desktop system. A second pair of HP ProLiant DL380 systems runs the SAP Internet Transaction Server, which handles communication between the Web and SAP R/3 applications. As far as patients are concerned, they are dealing directly with their chosen optician, and the back-office functions are transparent to them.

Two HP ProLiant DL760 4-way servers host the firm's SAP R/3 database and SAP applications. This server cluster uses Microsoft's clustering technology for added resilience. Two other DL760 6-way servers run SAP R/3 Application Server, protected by the HP ProLiant servers' redundant architecture and SAP's standard load balancing and failover capabilities.

All HP ProLiant servers link to the SAN via six HP StorageWorks HSG80 Fibre Channel controllers, providing a redundant fabric with multiple pathways for high availability and reliability. ILG can link multiple, pre-configured EMA12000 units for virtually unlimited storage capacity and scalability. Dual power supplies, controllers, hot swappable drives and multi-level RAID architecture ensure fault tolerance against system outages and data loss.

seeing the light of a SAN

ILG worked with HP value-added reseller, Compelsolve, and HP Services to configure, size and build the new SAN-based IT infrastructure. Along with excellent implementation support from Compelsolve, ILG has good experience with HP Services. In one case, King and his staff were able to resolve a glitch in an HP ProLiant server with a single telephone call. "We seldom have to call HP Services, but when we do the HP technical consultants are responsive and easy to work with."

According to King, the new SAN environment makes life easier, particularly when compared to the previous direct-attached, in-cabinet storage. "Not only was our DAS storage architecture unable to support our growth path, it was a complete nightmare to manage," he explains. "We could not move or allocate storage from one server to another so we ended up with a lot of wasted capacity. It was also much more difficult to upgrade or add new storage."

King continues, "Our HP StorageWorks SAN allows us to add storage when needed without rebooting or experiencing any downtime. When we add 100GB of new storage to our SAN, for example, it takes just a few minutes. In the past, expanding storage meant adding a new server and all that entails, which would have taken a day or more."

lights-out management made easy

ILG uses the HP StorageWorks Enterprise Backup Solution (EBS), which improves ILG's disaster tolerance and backup management. Comprised of an HP StorageWorks ESL9198SL tape library and Veritas NetBackup software, the EBS provides virtually lights-out backup management, saving time and improving recovery readiness. The outsourcing firm backs up 250GB daily.

While occupying only a little more than half a square meter of floor space, the ESL9198SL library offers up to 21.8TB of native capacity and data throughput of up to 316.8GB per hour when equipped with eight SDLT drives. The HP StorageWorks command console and HP Insight Manager software combine to give ILG system administrators point-and-click control of all servers and storage assets, including monitoring, troubleshooting and resource allocation.

"We no longer have to pull data across the network to perform our backups, which isn't an option anymore considering the huge volume of data we now manage," King says. "It's all there in the SAN, so backups have no impact on overall system performance. Our staff can just keep working. That's important as we expand the scope of our operations, particularly internationally. We need to be up 24x7, and our HP infrastructure and 24x7 technical support from HP Services makes that possible."

As soon as ILG went live with the mySAP.com applications in the spring of 2002, its data volumes began to expand rapidly. "The transactional nature of our services and our fast-growing base of customers dramatically increase our storage demands," King notes. "New customers generate new master data records. SAP applications also generate many auditing-related documents, such as change records. This valuable feature and legal requirement also requires a robust data-management strategy. Our HP StorageWorks SAN and backup system makes it easy to manage."



keeping a watchful eye on space conservation, budgets and the future

The new SAN allows ILG to pool and consolidate storage management – while reducing data center space. “Our HP StorageWorks SAN allowed us to order smaller, rack-mount HP ProLiant systems, which frees up a tremendous amount of computer-room floor space,” King observes. “We’d probably need about twice the floor space for our IT infrastructure if we hadn’t converted to SAN storage.”

While ILG has no serious competitors at the moment, the firm is not taking anything for granted. According to King, “We expect the competitive landscape to change at some point. By selecting global partners HP, Microsoft and SAP, we ensure our IT infrastructure and support services can easily match our growth – and do it cost-effectively.”

business results:

- An HP StorageWorks SAN provides unlimited growth potential and investment protection for ILG’s mission-critical SAP CRM and fulfillment-management applications.
- The HP StorageWorks SAN reduces the time required to add new storage from days to minutes.
- The HP Enterprise Backup Solution provides ILG with lights-out backup operations and disaster-recovery protection.
- The centralized HP StorageWorks SAN, in conjunction with HP ProLiant servers, saves valuable computer-room floor space.

what makes it work:

hardware:

- HP StorageWorks Enterprise Modular Array 12000 (EMA12000) system configured into a storage-area network
- HP StorageWorks HSG80 Fibre Channel controllers
- HP StorageWorks 16-port Fibre Channel switches
- HP StorageWorks ESL9198SL tape library
- HP ProLiant servers, including models DL380, DL580 and DL760
- HP iPAQ thin-client desktop computers
- HP iPAQ pocket PCs

software:

- HP StorageWorks enterprise backup solution
- HP Insight Manager
- HP StorageWorks command console
- mySAP.com solutions, including SAP R/3, mySAP CRM Customer Interaction Center and mySAP Enterprise Portals
- Microsoft Windows 2000 Advanced Server and Data Center Server
- Veritas NetBackup

hp services:

- Configuration
- Implementation
- Design
- Ongoing 24x7 technical support

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