

Birmingham Hippodrome gives SIOS Protection Suite® two thumbs up



SIOS software ensures 24/7 availability of theatre's online ticketing system

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-Ben Magson, Systems Administrator,
Birmingham Hippodrome



The theatre with the highest regular annual attendance in the United Kingdom uses SIOS Protection Suite software to safeguard its online ticketing system keeping it available 24/7, even in the event of software bugs, hardware failure or unanticipated outages. SIOS Protection Suite meets Birmingham Hippodrome's failover, replication and disaster recovery needs. By moving off a hosted server and onto its own in-house networking infrastructure, the theatre has also freed itself to develop a new marketing strategy based around its website and database of customers.

Before choosing SIOS, Birmingham Hippodrome shared a hosted system from Birmingham Arts IT (BAIT) with 14 charitable trusts and art venues across the city of Birmingham. BAIT provided Birmingham Hippodrome with its ticketing system and all back office functions. Because the server was shared, improvements and modifications had to be approved by all BAIT organisations. Birmingham Hippodrome could not tailor the server to suit its own marketing needs; nor deploy a disaster recovery strategy unless all other organisations sharing the server agreed to the potentially expensive upgrade.

The busiest theatre in the UK, Birmingham Hippodrome can sell £80,000 - £85,000 of tickets in a single day. Most of these tickets sales occur via the Internet. According to Director of Operations Mike Bradford, the theatre's online ticketing is "very much a 24/7 system," with the only "low" period of sales occurring around two o'clock in the morning. A single day of server downtime for the Birmingham Hippodrome costs them approximately £20,000. Even a few hours of downtime can be expensive for the popular theatre.

In two years with BAIT, Birmingham Hippodrome experienced two major outages, each with downtime of more than one day. Bradford said it was not these occasional outages, but rather "the fact that there was always the possibility of something worse happening and the associated worry it caused us that made us bring the IT in-house."

The Challenge

Birmingham Hippodrome wrote a detailed specification calling for a new network infrastructure that would deliver full failover and disaster recovery, with no single point of failure. The new infrastructure would

need to be flexible and resilient enough to enable them to tailor the system to improve marketing around its website and database of customers. That meant the infrastructure would essentially need to run all back office tasks, including a new e-mail system and the theatre's own ticket booking, de-booking and credit card service. The system would need to support Birmingham Hippodrome's Partner Organisations: Birmingham Royal Ballet and DanceXchange. Birmingham Hippodrome contracted Linux specialist reseller eSpida, an IT infrastructure consultancy. eSpida was supported by SIOS UK Solution Centre Open Minds.

The Solution

To deliver full failover and disaster recovery protection, eSpida built two server rooms approximately one mile apart, each replicating to the other so that if one server failed, the other server would continue operations. They also implemented two leased lines and established two service providers at two points in the city with two separate main supplies. To simplify server "housekeeping," Birmingham Hippodrome's network infrastructure has been virtualised with 20 virtualised servers on IBM x3650 hardware and twin dual-core CPUs with 32 GB RAM and local disk.

They use SIOS software to ensure continuous availability of applications and the online ticketing system. SIOS Protection Suite creates a "mirrored" server system on the remote site that is identical to the primary server. If the primary server fails, SIOS software can shut it down and transfer all operations to the backup server while providing continuous access to applications and data. This capability ensures that both Birmingham Hippodrome staff and customers shopping for tickets online are unaffected by system failures or maintenance. SIOS software monitors system and application health, maintains client connectivity and provides uninterrupted data access, giving Birmingham Hippodrome the reliable, fault-resilient system they need.

Benefits

Nick Roberts, a technical sales consultant for eSpida, said: "One of the reasons we use SIOS Protection Suite is that the history and heritage of the product goes back decades, really. Especially in this industry, where technologies come and go so often, it's good to see something out there that's tried and tested like SIOS Protection Suite. Your investment is safe with a product like that because you know it'll still be there years from now."

Another benefit of SIOS software, Roberts continued, is that installation and set-up is a quick and hassle-free process. Although high availability and protection of the theatre's overall operations may have seemed like a daunting task, SIOS Protection Suite was installed, configured, tested and in production within a few days. Roberts added: "As a Linux specialist, I appreciate the way SIOS software helps me to grow Linux within infrastructures and displace Microsoft with a more cost-effective, reliable and secure Linux solution."

Throughout the deployment of SIOS Protection Suite, the eSpida team enjoyed the support of UK Solutions Centre Open Minds. "The main benefit of Open Minds is the quality of support they provide when you phone up with a problem," said Roberts. "You talk straight away to highly skilled technology-minded people who know exactly what you're talking about, exactly how you've implemented and are using the product. Open Minds collapses the whole process very quickly."

Birmingham Hippodrome's new networking infrastructure has been in place since January 2008. Systems Administrator Ben Magson said he tests the servers weekly, performing a failover so that each system gets a turn to be fully in service for a week. Each server therefore shares the load.

For the first six months of operation, Magson noted, one of the servers was freezing up about once a month. In each case, SIOS software failed over to the back-up server in under a minute. The few initial instances of server failure went largely unnoticed, thanks to SIOS. Bradford said future IT plans for the theatre involve replicating data to a remote site instead of tape back-ups.

The Result

"We are very pleased with the recovery time," said Magson. "SIOS Protection Suite is very simple, very effective and extremely easy to use. It does what it is supposed to do and we are happy with it."

Shobana Patel, Open Minds Managing Director, commented, "eSpida has worked with us for many years now. They are highly trained professionals and have the expertise to take on a major project such as the Hippodrome. SIOS software enables them to provide a total solution that includes hardware, installation, as well as supplementary services related to disaster recovery."

About SIOS

An essential ingredient in any cluster solution, SIOS SAN and #SANLess clustering software provides the flexibility to build clusters your way to protect your choice of Windows or Linux environment – and any configuration (or combination) of physical, virtual and cloud (public, private, and hybrid) storage – without sacrificing performance or availability. SIOS' unique #SANLess clustering solution eliminates both the cost and the single-point-of-failure risk of traditional shared-SAN storage.

Founded in 1999, SIOS Technology Corp., is headquartered in San Mateo, California, and has offices throughout the United States, United Kingdom, and Japan.

About eSpida

eSpida offers IT infrastructure consultancy using Linux and open-source technology, within mixed platform environments. eSpida's team of in-house technical consultants helps IT departments deliver technically based projects successfully and on time. We pride ourselves upon our high level of technical expertise, coupled with 'real-world' understanding of IT issues and budget constraints.

About Open Minds

Open Minds provides software solutions, support, consultancy and training for high availability (fault resilience) and disaster recovery solutions for IT systems. Open Minds' strong team of technical consultants offer experience gained from many years of successfully implementing and supporting SIOS solutions throughout the world. Open Minds are the registered SIOS Solution Centre for the UK, Ireland, South Africa and the Persian Gulf, and partners with VARs, Software Houses and Systems Integrators to provide complete technical back-up including pre-sales, installation services and

