

## bluecycle.com Boosts Speed 10 Times for Its Internet Auction



Bluecycle.com  
London, UK  
www.bluecycle.com

### Industry:

Financial Services

### Oracle Products & Services:

Oracle Database Enterprise  
Edition  
Oracle Real Application Clusters

### Key Benefits:

- Boosted database-access speed by 10 times
- Saved around US\$130,000 in lower hardware and software costs
- Eliminated potential downtime costs of thousands of dollars per hour
- Increased availability and reliability of online auction
- Reduced costs of adding capacity

*"One of the things I particularly like about Oracle Real Application Clusters is having the ability to expand quickly without all the trouble of massively upgrading hardware." – Keith Misson, Chief Technology Officer, bluecycle.com Ltd.*

Despite a rash of early failures, internet businesses are making a comeback. Some, like bluecycle.com, are even making money. The U.K.'s largest online auto salvage Web site, bluecycle turns a profit by auctioning all of Norwich Union's write-off vehicles each year. All go to registered dealers, who repair the vehicles for resale or dismantle them for parts.

bluecycle has succeeded largely because buying online saves dealers the time, expense and the hassle of going to onsite auctions. Plus the company can count on a steady supply of vehicles from Norwich Union, bluecycle's corporate parent and one of the biggest auto insurers in the United Kingdom. In addition to the auction, bluecycle runs two related operations: an "e-claims" business that uses the internet to find replacement cars for insured motorists and "e-tenders," which helps Norwich Union procure all manner of goods and services over the internet.

bluecycle holds a lead in this new online market, but it knows competition will continue to increase. That's why it beefed up its site using Oracle Database with Real Application Clusters to virtually assure non-stop availability for the auctions. Oracle's advanced clustering technology also saves money by letting bluecycle add capacity easily and cheaply as its Web businesses grow.

"One of the things I particularly like about Oracle Real Application Clusters on Linux is having the ability to expand quickly without all the trouble of massively upgrading hardware," said Keith Misson, bluecycle's CTO. In addition to rolling out the Oracle database clusters, Misson switched to a Linux operating system in combination with Intel-based Hewlett-Packard hardware—a move that will add to bluecycle's savings as it boosts system performance.

### Non-Stop Availability Prevents Downtime Losses

In moving to Oracle database clusters, bluecycle protects its high-value auctions from unexpected failure. "We have a business-critical Web site, and it must be operational for our business to function at all," Misson said. "Furthermore, the need for constant up-time will only increase, as the business grows and bluecycle brings out new types of services.

"At the moment we have a relatively controlled user group and controlled times when the auctions open and close, Misson continued. "But future plans may involve opening up services to the general public—and then you really have to be available all the time. We can't really do that without having a solid database backend." Non-stop reliability also helps Misson and his IT team rest easier at night. "My database administrator doesn't get tired from extended evenings at work," he added. "It makes a big difference in terms of morale."

Not to mention costs. A system failure in the middle of an auction can cost bluecycle dearly. "We're talking about thousands of dollars an hour for an outage during those peak times," Misson explained. "By avoiding outages, we're saving money from running a cluster solution, as opposed to running an old single machine system."

The IT group also gains flexibility, he pointed out, since it can do maintenance on the system by downing a single node without affecting Web site availability. Oracle database clusters also outperformed bluecycle's old system. "The new system is around 10 times faster running the same queries," Misson said.

### Immediate and Long-Term Savings

As bluecycle keeps growing, its savings will grow in step. "The second source of savings is going to be when we reach capacity with this cluster and can buy incremental computing power with inexpensive servers," Misson said. "The actual cost of adding a node is much, much less than trying to buy a bigger box and migrating all our data onto it." Right now, bluecycle runs only two nodes, but with the database cluster architecture in place, the company can handle a surge in computing demand at a fraction of the cost.

Even in the first year, Misson figures bluecycle saved around US\$130,000 upfront in hardware costs by moving to the more cost-effective Oracle database clusters. And when the time comes to add capacity, bluecycle will save thousands more by "sticking extra nodes in the cluster" instead of buying a whole new system, Misson explained. "To invest in the same capacity I have now with the room for expansion I have with Oracle Real Application Clusters would have been significantly more expensive."

### **Oracle and Linux: An Affordable, Flexible Match**

bluecycle also gains financial flexibility by spacing out its technology expenditures. "We can decide this year to just buy two nodes," Misson continued. "Then as projects come on stream, we can add nodes and it doesn't affect the same annual budget." That's key for bluecycle, which like most businesses these days has had to live with tighter financial controls.

Doing more for less is also why the company decided to switch to the Linux operating system. The software is virtually free, and the support agreements are much cheaper than a proprietary OS. "I don't want to be tied to a single supplier whose assistance costs you a fortune," Misson added. Plus these days it's easier to find Linux-skilled professionals. "There are a lot more people you can call on now who understand Linux," he said. "The knowledge base is growing rapidly."

bluecycle's IT group also likes how Linux expands its hardware options. "If I want to buy another node for my cluster, we can go with any Intel-based machine out there," Misson added.

### **Why Oracle?**

Misson's IT group had been using Oracle databases since the company was started in 1999, to develop applications for Norwich Union. But as the group prepared to launch bluecycle's new Web site, it took a close look at the current Oracle Database and the rest of the market, Misson said. "Because we needed a robust, scalable, solid platform, we decided to go with Oracle Real Application Clusters."

Before going live, bluecycle tested its new Oracle configuration, which consists of a single instance of an Oracle Database running on a group of servers connected to a shared disk array. "The actual deployment was very smooth," Misson said. "It was a success." Since data in the database is shared between multiple

nodes, if one goes down the remaining nodes take over, and users won't notice a break in service. If it outgrows its current system, bluecycle simply adds more nodes while further boosting the reliability and speed of the system as a whole.