

# Parallels® Virtuozzo Containers

## Customer Success Story

### Server Efficiency for Cash Machine Company

Cardpoint Plc virtualises servers to save money and improve efficiency in the data centre.

#### Business Challenge

Cardpoint is a pan-European ATM supplier, providing cash machines for retail environments. The company runs approximately 60 servers in its UK offices in Blackpool and London, supporting 130 employees operating throughout the UK and Germany.

“Traditionally when we needed a new IT service we’d go out and purchase new infrastructure for it,” said Harris Bokhari, Infrastructure Service Manager at Cardpoint. “This means the number of servers we have has continued to grow, resulting in us running a great deal of hardware, with all the associated costs, such as data centre space, electricity, and air conditioning.” Bokhari was also concerned with the inefficiency of this deployment model as it was not likely that all of the hardware resources were being used well. He decided he didn’t want to continue to buy several more servers for each new system,

“Our existing servers weren’t all being utilised all the time, and we weren’t operating as efficiently as we could. As such, when we needed a new set of servers we made the decision to look into virtualisation, reducing the investment in new hardware and effectively increasing the potential of our existing assets.”

#### Evaluation

Cardpoint evaluated both Parallels’s OS-level virtualisation tool, Parallels Virtuozzo Containers, and VMware’s hardware virtualisation tool, ESX Server. The OS-level approach was considered a better fit for Cardpoint’s deployment, and offered a more cost-effective solution than VMware.

According to Bokhari: “When we evaluated the products we were particularly impressed with Parallels Virtuozzo Containers as OS virtualisation avoids the poor performance caused by double caching, which is associated with virtualising the hardware. With hardware virtualisation like VMware, each VM has to write to both itself and the physical server and this can really erode the efficiency being gained. This is particularly important to us as we wanted to virtualise Microsoft SQL Server and Oracle databases, and needed to avoid degradation in I/O.”

“On top of that, we were staggered by the price difference between Parallels Virtuozzo Containers and VMware ESX Server. Parallels Virtuozzo Containers just offered so much more value for money, meaning we could buy a brand new server, upgrade the memory on an existing server, and buy extra Parallels Virtuozzo Containers licences for the same as VMware ESX,” continued Bokhari.

#### Parallels Virtuozzo Containers Solution and Implementation

Parallels Virtuozzo Containers for Windows has been deployed in the data centre at Cardpoint’s headquarters in Blackpool, which centrally manages the IT for the all of the company’s operations throughout Europe.

Cardpoint engaged Objectronix Ltd, a virtualised infrastructure and IT security specialist to implement the first virtual server and show the in-house IT team how to further deploy the technology themselves.

Bokhari commented; “Objectronix did a great job on the initial implementation and in our own efforts to roll it out further we’ve found that Parallels Virtuozzo Containers is

#### About Cardpoint Plc

Cardpoint is the market leader in the independent cash machine sector in the UK and Germany. Following the acquisition of Travelex ATMs in April 2007, which included 1,070 machines, Cardpoint has 5,900 cash machines. Over 8 million withdrawals are made at Cardpoint owned cash machines each month.

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Infrastructure Service Manager,  
Cardpoint

very quick and easy to use. It's really straightforward. If we do have any worries or questions, we've found Parallels's technical support very responsive and they work really hard to get problems solved as quickly as possible."

## Results

Deploying the virtualisation solution meant the cash machine company could significantly reduce the number of new servers purchased. Cardpoint has also increased the productivity of its existing hardware by virtualising the BlackBerry and Oracle servers used for key communication and dispatch applications.

Due to the considerable size of each workload and virtual environment, and the corresponding required hardware resources, Cardpoint deployed four virtual environments per server. "We now have four virtual servers running on each box, so we've massively increased the utilisation and efficiency of our hardware. It's hard to give a specific figure for the monetary saving, but this has definitely been the right approach for us and has certainly paid off!"

Cardpoint estimates that using virtualisation to limit the amount of new hardware they needed to buy reduced the budget for the procurement by approximately 30%. The technology has also given Cardpoint greater resilience as they can now back up all their key applications onto one of the boxes every night and if there is any problem they can very quickly switch to that server.

Bokhari points out: "If we'd gone down the traditional route we wouldn't have had this advantage: we wouldn't have gained resilience because we never would have bought an extra server just for back up purposes."

In addition, using virtualisation allows them to back-up the dispatch environment so they can run tests. This system is vital to the business so the risk of encountering performance issues when they introduced new applications was previously a real concern. With Parallels Virtuozzo Containers, tests can be run in a virtual environment completely partitioned from the rest of the server. If problems occur, the environment can be quickly taken down and a new one introduced with minimum fuss or disruption to the rest of the system.

"We've had a really good experience with Parallels Virtuozzo Containers. In fact, whilst Parallels Virtuozzo Containers was initially bought to run on the Oracle and BlackBerry Enterprise Servers (BES), we've now rolled it out onto further servers across the data centre and are currently looking into using it on the servers housed at the company's London offices," said Bokhari.

## Future plans

"I've started thinking about ways to cut down the number of servers we're using in London. Basically the implementation in Blackpool has gone really well and we can see all the benefits from it so I think this is just the start to be honest," said Bokhari. "I definitely don't want to increase the number of servers we're running, so if we need new servers in the future, I won't buy new hardware, I'll use virtualisation on our current environment to make boxes available."

Learn more at [www.parallels.com/virtuozzo](http://www.parallels.com/virtuozzo)

## Environment details for box-out

- Windows 2003 Enterprise.
- BlackBerry Enterprise Server (BES)
- FTP solution called Connect Direct.
- Virtualised dispatch desk solution, also includes another server related to the same area (Oracle server).

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## Parallels Virtuozzo Containers Solutions

- **Server and OS Consolidation**
- **Business Continuity (HA/DR)**
- Centralized Desktop Management
- Dynamic Workload Management
- Internal and Commercial Hosting
- Development and Testing



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