

## Virtuozzo Reigns in Server Management and Delivers Unmatched Performance

*Supporting a wide range of engineering, departmental and user requirements, arvato mobile leverages Virtuozzo to ease server management demands.*

### Business Challenge

The IT department at arvato mobile is like many organizations: many projects, many demands and too little time and resources to address everything, arvato mobile creates mobile applications that often must interact with multiple diverse systems. The company has one of the largest repositories of and access to music, film and TV content and its applications provide content, category and royalty management which creates massive requirements for complex applications, application integration and server storage, arvato mobile has hundreds of servers to support internal applications, business critical applications, and applications in development, in addition to numerous business department and user support servers and applications.

### Evaluation

arvato mobile had been using an open source virtualization solution and was sufficiently satisfied until the number of servers grew and application availability became critical. "We needed to evaluate and control resource use inside our virtual environments," said Lukas Loesche, Director of IT Operations. "We also needed centralized control; with hundreds of servers it's really great to have a single solid solution like the Virtuozzo Management Console and not some home made collection of scripts." Other administrative capabilities such as the integrated backup utility, the migration of virtual servers in seconds and the real-time resource management capabilities became important tools for arvato mobile. "Virtuozzo's ability to backup its virtualized servers across the entire server cluster and restore them on any node is just fantastic." "We also evaluated comparable software from other suppliers," said Loesche, "but we found the performance of Virtuozzo to be the best. We still use other virtualization solutions in our lab environment but Virtuozzo is the only software we use for production servers."



As the leading mobile entertainment provider in Europe, arvato mobile, a subsidiary of arvato Bertelsmann AG, develops mobile solutions for network operators, media companies and internet portals.

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### Virtuozzo Scenarios

- Server Consolidation
- Disaster Recovery
- Application Management
- Departmental Servers
- Development & Testing

# Virtuozzo Enables Cost Effective Disaster Recovery Solution

## Virtuozzo Solution & Implementation

### Engineering: Development & Testing

Engineers commonly require complex development environments: a virtual server for the application in development and then later additional virtualized servers for any applications that may interact with the new application. Once an application is developed, it is cloned into an integration/staging environment to finalize testing and approval as a production server, arvato mobile now clones the required virtualized servers in a matter of seconds using a single command, without dedicated hardware and without extensive configuration or provisioning time. "If we had to provision dedicated servers manually it would take hours or days. By centrally managing hundreds of development servers, we probably have saved years in man hours," said Loesche. "We haven't computed a formal return on investment for Virtuozzo, but I can say its impact has been huge compared to managing single servers."

### Server Consolidation

Every virtual private server (VPS) has a specific purpose, either a particular application or specialized service. 5-10 virtual servers are loaded on a physical server, with the exception of databases. Database servers are loaded in a single instance on a server to take advantage of the resource monitoring, system backup and disaster recovery. "If we detect a hardware error, we're able to move a database server from one hardware node to another with practically zero downtime. If we have a hardware failure we're able to restore a failed node on any other hardware - regardless of configuration - in minutes," continued Loesche.

● Single VPS: Database
● Virtuozzo
● Linux OS
● Dell Power Edge

VPS1: Proprietary Application	VPS 2: Specialized Server: Gateway	VPS 3: Web Server	VPS 4: Specialized Server: Proxy	VPS 5: Business Application
Virtuozzo				
Linux OS				
Dell Power Edge				

## arvato mobile's Future Plans

Today, Virtuozzo is loaded on the majority of arvato mobile's hundreds of Linux servers and they are now deploying Virtuozzo for Windows-based development database servers. The long-term goal of the IT department is to deploy Virtuozzo on all production servers to significantly lower their overall management, software and hardware costs.

## Hardware

- Dell Power Edge
- CPU: Dual Xeon
- RAM: 6 GB+

**"Managing hundreds of development servers, we probably have saved years in man hours,"**

*said Loesche.*

## Software Applications

- Databases
- Proprietary Applications
- Business Applications
- Specialized Servers (Gateways, Proxys)

**"If we detect a hardware error, we're able to move a database server from one hardware node to another with almost zero downtime. If we have a hardware failure we're able to restore a failed node on any other hardware - regardless of configuration - in minutes,"**

*continued Loesche.*

For more Information on Virtuozzo or SWsoft please visit: [www.virtuozzo.com](http://www.virtuozzo.com)

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