

# Use Cases: Why Customers Have Chosen IBM's Enterprise Linux Server



## Many customers are realizing the benefits of consolidating on IBM's Enterprise Linux Server

- Atos Origin
- AutoData Norg AS
- Baldor
- Banco Pastor
- Bank of New Zealand
- Bankia
- BG-Phoenics
- BSBC Minnesota
- Business Connexion
- City of Honolulu
- Colacem S.p.A.
- Computacentre
- Dundee City
- Efis EDI Finance
- El Corte Ingles
- Embasa
- Endress+Houser
- EuroControl MUAC
- gkd-el
- IBM Blue Insight
- Liberty Mutual
- Marist
- Marsh
- Miami Dade County
- National Registration Dept
- Nationwide
- NWK
- Procempa
- RCBC
- RENFE
- Salt River Project
- Shelter Mutual Insurance
- Shikoku Electric
- Sparda Datenverarbeitung eG
- Svenska Handelsbanken
- University of Bari
- University of Arkansas
- University of NC
- VietinBank

**Let's look at a few of these up close...**

# How some businesses solved their challenges with the Enterprise Linux Server

## Before

## After

### Company

# A

Server sprawl meant their data center was at capacity

- Reduced data center footprint by 30%, heat output by 33% and carbon footprint by 39%

### Company

# B

An acquisition led to multiple platforms, steep IT and admin costs, and unsatisfied customers

- Reduced IT costs by 50%, cut power costs by 40%, and reduced floor space by 6x

### Company

# C

Existing distributed platform not scalable to handle future growth

- Reduced space and power consumption by 80%, monthly HW charges by 50%
- Expected savings of \$16M over first 3 years

# How some businesses solved their challenges with the Enterprise Linux Server

## Before

## After



Server sprawl meant their data center was at capacity

*“Deploying [ELS] to address our carbon footprint and cost savings concerns was a very big deal, especially at the senior management level.”*

*- Lyle Johnston, Infrastructure Architect*



An acquisition led to multiple platforms, steep IT and admin costs, and unsatisfied customers

*“Migration of our SAP application servers to Linux on the [ELS] produced an immediate increase in performance, and has made it easier to manage and maintain our systems.”*

*— Mark Shackleford, Director of Information Services*



Existing distributed platform not scalable to handle future growth

*“We were able to provide a reduction in server cost of more than 50% to our customers. Linux on [ELS] saved significant data center floor space and power consumption.”*

*- Steve Womer, Senior IT Architect*

# University of Arizona College of Pharmacy (Tucson, Arizona)

One of the top 10 colleges of pharmacy in the US,  
providing a pharmacists call center and medication management service

- Used an Intel-based Apple Mac Pro and MySQL database
- Processing information for more than 2.5M members



## Business challenge:

- Anticipated astronomical growth – to 10M patients and millions of volumes of claims data in coming years

## IT challenge:

- Major I/O bottlenecks caused delayed analysis of patient data
- Hardware reliability – Apple was not planning an upgrade for the Mac Pro system

# University of Arizona College of Pharmacy (Tucson, Arizona)



## Solution:

**Replaced their Mac servers with an Enterprise Linux Server, and replaced MySQL with IBM DB2 for Linux**

- The full new environment was migrated over a weekend
  - The ELS was installed on Friday, the software was loaded and tested on Saturday, and the entire environment went live on Sunday...
  - ...with no hiccups or problems!

## Benefits:

- Reduced data load times by 1/3
- Improved I/O performance for better data analysis
- Batch processes run during normal business hours without disrupting operations
- Today, their system is being run by a single Linux programmer on a part-time basis

*“One of the reasons we went with the [System] z114 [server] was the ability to enhance the box almost infinitely. We can add more processors, memory, and a lot more I/O without reconfiguring”*

— Kevin Barber, director, data systems, UA College of Pharmacy

## White Cube (London, UK)

**Focused on establishing lasting relationships with artists, as well as providing a richer experience for clients, artists and the public...**

- Recently expanded internationally, opening new galleries in Hong Kong and Sao Paulo

### Business challenge:

- Provide real-time inventory access and continuous **availability** in worldwide context, with options for **growth**

*“We have suddenly transformed from a U.K.-centric business to a truly global organization, operating in three different time-zones. From an IT perspective, this posed some real challenges: our existing systems landscape was never designed for 24/7 operations and having a much smaller maintenance window made it more difficult to ensure availability.”*

— James Meara, IT manager at White Cube

### IT challenge:

- Replace the 12 aging x86-based Sun servers
  - Supporting their core systems - including file servers, warehousing and logistics system, and traditional email and back-office systems



**Larry Bell**  
**Mirage Collage and the Light Knots**

16 October 2013 – 12 January 2014  
North Galleries, Inside the White Cube

# White Cube (London, UK)



[Video](#)

## Solution:

### Consolidate distributed servers onto IBM Enterprise Linux Server

- Recognized benefits of the platform
  - Proven track record in traditional industries for reliability, performance, and flexibility
  - A single backbone for their entire IT landscape
- Enabled close integration of databases, repositories and email systems with new Cognos analytics platform

## Benefits:

- Noticeable improvement in response times for warehousing and logistics systems
- Scales up to meet the needs of the business – set up new VMs in 2 minutes!
- VM live guest mobility means no need to bring systems down for maintenance and upgrades
- Cognos eliminates spreadsheet-based analytics

*“We wanted to find a platform that was built for **high availability**, that was **versatile** enough to handle all of our diverse workloads and that could **scale** up to meet new demands such as **business intelligence**. Running [IBM ELS] was the best solution to meet all of our requirements.”*

*“In all honesty, **managing a Linux environment on [ELS] platform is hardly any different from managing a Linux environment anywhere else**. We still use the same monitoring and administration tools, and our network and storage specialists have not needed to learn any mainframe-specific skills at all.”*

— James Meara, IT manager at  
White Cube



## Algar Telecom (Uberlândia, Brazil)

**Provides more than 800,000 customers with mobile and fixed voice telephone and broadband, as well as corporate communications and pay-tv**

- Business expansion occurring against a backdrop of rising operational costs and increasing competition

### Business challenge:

- As customer base grew, concern about keeping up with increased demand for services

*“In the past, we did not take a very strategic approach when it came to expanding our IT infrastructure, we just added new servers as demand increased... The result was an environment that was not efficient or sustainable: we suffered from poor performance, with frequent service interruptions, and the complexity and cost of maintaining everything was starting to get out of control”*

— Rogério Okada, IT manager of Algar Telecom

### IT challenge:

- Upgrade the IT infrastructure to a solution that offered **simpler maintenance, lower cost of ownership and greater flexibility**



## Algar Telecom (Uberlândia, Brazil)

### Solution:

### Consolidated 90+ distributed servers into a 24-core Enterprise Linux Server

- Migrated core business applications, including ERP and CRM, to the new platforms
- Solution delivers top levels of performance, stability and scalability

### Benefits:

- Massive simplification of IT infrastructure
  - Huge reduction in data center floor space and a 70% cut in energy and cooling expenses
- Operational risk has been reduced, including fewer single points of failure
- Systems can be recovered up to 90% faster

*“The IBM technology was completely new to us, but we clearly recognized the **huge value** that it could bring to our operations.”*

*“We have completely transformed our infrastructure and the way in which we manage it... We estimate that our **operational efficiency** has increased by at least 30% as a result. With our core business applications running on the **most reliable and secure platform in the marketplace**, we can deliver better service to more customers and focus on growing a better business.”*

— Rogério Okada, IT manager

## Sicoob

### **Business Challenge:**

Brazilian credit union system needed to ensure that it could meet members' needs for **24/7 service** and **mobile access** to information. Existing distributed infrastructure could not **scale** to provide the necessary performance and availability, or meet data consolidation requirements for analytics.

### **Solution:**

- Virtualized distributed servers onto 2 ELS servers
- Capable of running more than 300 virtual servers on one platform
- IBM DB2 software supports 50 major databases

### **Results:**

- Enabled 600% growth in mobile solutions, and 200% growth in internet banking
- Supported 60% increase in in-branch transactions, while avoiding \$1.5M a year in electricity costs
- Transformed the speed, reliability and efficiency of service delivery to members

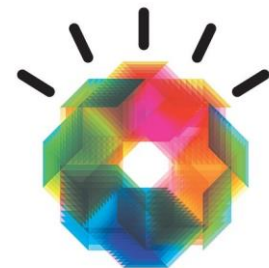
*“Compared with databases on our previous distributed landscape, DB2 running on Linux on the [ELS] platform offers more reliability and performance, and better integration with our backup, monitoring and ETL tools.”*

*—Paulo Nassar, IT Processing and Storage Infrastructure Manager, Sicoob*



# IBM's own data center transformation and consolidation project has delivered results

<u>Before</u>	<u>Today</u>
<b>~15,000</b> Distributed servers	<b>~30</b> Enterprise Linux Servers
<b>155</b> Data centers	<b>7</b> Data centers
<b>30</b> Images per admin	<b>100</b> Images per admin
<b>&lt;10%</b> Average server utilization	<b>&gt;60%</b> Average server utilization



**80% less energy, 85% less floor space**  
**~\$100M total cumulative savings to date**

# Customers highlight the value of consolidating on the IBM Enterprise Linux Server

Data from IDC report (July 2013) surveying 6 organizations that consolidated onto Enterprise Linux Server platform:

**79**

Average number of servers consolidated by each organization

**84**

Average number of servers *avoided* purchasing

**70%**

Reduced infrastructure costs (hardware, software and services)

**71%**

Average reduction in software licensing costs

**57%**

Reduction in operational costs due to increased IT staff productivity

**1/2**

Cut in average outage time

**5.3 and 501%**

Average payback period (in months) and calculated ROI