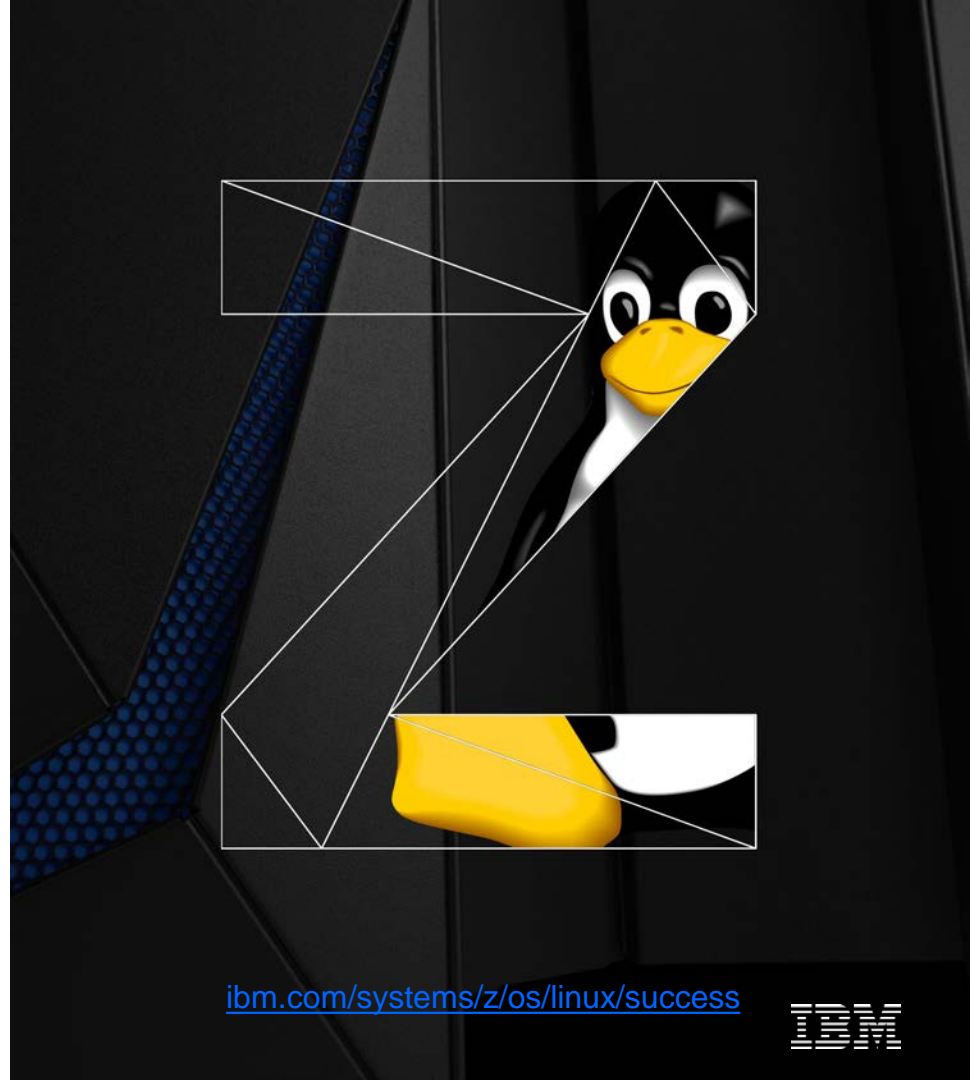


Linux on IBM z Systems (IBM Z)

Success stories

Jerry Hosch
hosch@de.ibm.com

23 Oct 2017



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FYI, the links point to the specific client slide in this deck -- Check speaker text of client slide for links to external and internal material

Banking & Financial Market

- [ZB, National Association \(USA, **Sep 2016**\)](#)
- [ABK-Systeme GmbH \(Germany, Mar 2016, **val. Sep'16**\)](#)
- [Sicoob \(Brazil, Jan 2016, **val. Oct'16**\)](#)
- [Mizuho Bank \(Japan, Oct 2015, **val. Oct'16**\)](#)
- [Banca Carige \(Italy, Apr 2014, **val. Sep'16**\)](#)
- [Sparda-Datenverarbeitung eG \(Germany, Dec 2014, **val. Jan'16**\)](#)

Computer Services

- [Vitec AutoData \(Norway, **May 2017**\)](#)
- [s IT Solutions Austria \(Austria, **Sep 2016**\)](#)
- [IT services provider \(EU, Oct 2014, **val. Dec'16**\)](#)
- [EVERTEC \(Puerto Rico, Aug 2014, **val Nov'16**\)](#)
- [IBM \(USA, Nov 2015\)](#)
- [Business Connexion \(South Africa, Apr 2014\)](#)

Education

- [University of North Carolina \(USA, 2009\)](#)

Energy & Utilities

- [Major utility organization \(Brazil, Jun 2015, **val. Aug'16**\)](#)
- [Kenya Power and Lighting Co. Ltd. \(Kenya, Nov2014, **val. Dec'16**\)](#)
- [Embasa \(Brazil, Jul 2011, **val. Jul'16**\)](#)

Government

- [KEONICS \(India, **Apr 2017**\)](#)
- [California DMV \(USA, Jul 2016, **val. Dec 2016**\)](#)
- [Dundee City Council \(UK, Jul 2016, **val. Jan'17**\)](#)
- [New York Municipal \(USA, Apr 2014\)](#)
- [Met Office \(UK, Apr 2014\)](#)
- [National Registration Dept. of Malaysia \(Malaysia, Dec 2010, **val. Jan'17**\)](#)

Industrial Products

- [Manufacturing company \(USA, Apr 2016, **val. Oct'16**\)](#)
- [China Steel Corp. \(Taiwan, Dec 2105, **val. Feb 2017**\)](#)
- [Baldor \(USA, 2013\)](#)

Travel & Transportation

- [European Railway Operator \(Europe, Sep 2014, **val. Oct'16**\)](#)



Cases ordered by GEOs (country, publication date or *validation date*)

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North America

- [ZB, National Association \(USA, **Sep 2016**\)](#)
- [California DMV \(USA, Jul 2016, **val. Dec 2016**\)](#)
- [Manufacturing company \(USA, Apr 2016, **val. Oct'16**\)](#)
- [EVERTEC \(Puerto Rico, Aug 2014, **val Nov'16**\)](#)
- [IBM \(USA, Nov 2015\)](#)
- [New York Municipal \(USA, Apr 2014\)](#)
- [Baldor \(USA, 2013\)](#)
- [University of North Carolina \(USA, 2009\)](#)

Latin America

- [Sicoob \(Brazil, **Jan 2016, val. Oct'16**\)](#)
- [Major utility organization \(Brazil, Jun 2015, **val. Aug'16**\)](#)
- [Embasa \(Brazil, Jul 2011, **val. Jul'16**\)](#)

Middle East & Africa

- [Kenya Power and Lighting Co. Ltd. \(Kenya, Nov2014, **val. Dec'16**\)](#)
- [Business Connexion \(South Africa, Apr 2014\)](#)

Greater China Group

- [China Steel Corp. \(Taiwan, Dec 2105, **val. Feb 2017**\)](#)

Europe

- [Vitec AutoData \(Norway, **May 2017**\)](#)
- [s IT Solutions Austria \(Austria, **Sep 2016**\)](#)
- [Dundee City Council \(UK, Jul 2016, **val. Jan 2017**\)](#)
- [ABK-Systeme GmbH \(Germany, Mar 2016, **val. Sep'16**\)](#)
- [Sparda-Datenverarbeitung eG \(Germany, Dec 2014, **val. Jan'16**\)](#)
- [IT services provider \(EU, Oct 2014, **val. Dec'16**\)](#)
- [European Railway Operator \(Europe, Sep 2014, **val. Oct'16**\)](#)
- [Met Office \(UK, Apr 2014\)](#)
- [Banca Carige \(Italy, Apr 2014, **val. Sep'16**\)](#)

Asia Pacific

- [KEONICS \(India, **Apr 2017**\)](#)
- [National Registration Dept. of Malaysia \(Malaysia, Dec 2010, **val. Jan'17**\)](#)

Japan

- [Mizuho Bank \(Japan, Oct 2015, **val. Oct'16**\)](#)



Cases ordered by Major Workloads (country, publication date or *validation date*)

FYI, the links point to the specific client slide in this deck -- Check speaker text of client slide for links to external and internal material

DB2 LUW

- [ABK-Systeme GmbH \(Germany, Mar 2016, val. Sep'16\)](#)
- [Sicoob \(Brazil, Jan 2016, val. Oct'16\)](#)
- [Mizuho Bank \(Japan, Oct 2015, val. Oct'16\)](#)
- [University of North Carolina \(USA, 2009\)](#)

Oracle DB

- [Dundee City Council \(UK, Jul 2016, val. Jan 2017\)](#)
- [EVERTEC \(Puerto Rico, Aug 2014, val. Nov'16\)](#)
- [Sparda-Datenverarbeitung eG \(Germany, Dec 2014, val. Jan'16\)](#)
- [Business Connexion \(South Africa, Apr 2014\)](#)
- [Met Office \(UK, Apr 2014\)](#)

Cognos, SPSS, InfoSphere

- [Kenya Power and Lighting Co. Ltd. \(Kenya, Nov2014, val. Dec'16\)](#)
- [IT services provider \(EU, Oct 2014, val. Dec'16\)](#)
- [University of North Carolina \(USA, 2009\)](#)

MobileFirst

- [ABK-Systeme GmbH \(Germany, Mar 2016, val. Sep'16\)](#)
- [Vodafone \(Spain, Feb 2016\)](#)
- [Banca Carige \(Italy, Apr 2014, val. Sep'16\)](#)

WebSphere Application Server

- [ABK-Systeme GmbH \(Germany, Mar 2016, val. Sep'16\)](#)
- [Sparda-Datenverarbeitung eG \(Germany, Dec 2014, val. Jan'16\)](#)
- [IT services provider \(EU, Oct 2014, val. Dec'16\)](#)
- [European Railway Operator \(Europe, Sep 2014, val. Oct'16\)](#)
- [University of North Carolina \(USA, 2009\)](#)
- [Banca Carige \(Italy, Apr 2014, val. Sep'16\)](#)

IBM Integration Bus, MQ, Message Broker, Enterprise Service Bus, WebSphere Portal

- [s IT Solutions Austria \(Austria, Sep 2016\)](#)
- [California DMV \(USA, Jul 2016, val. Dec 2016\)](#)
- [ABK-Systeme GmbH \(Germany, Mar 2016, val. Sep'16\)](#)
- [University of North Carolina \(USA, 2009\)](#)

SAP Application Server

- [Manufacturing company \(USA, Apr 2016, val. Oct'16\)](#)
- [Major utility organization \(Brazil, Jun 2015, val. Aug'16\)](#)
- [Baldor \(USA, 2013\)](#)
- [Embasa \(Brazil, Jul 2011, val. Jul'16\)](#)





“Building a virtualized server farm with SUSE Linux Enterprise Server on the IBM System z13s provides us with a scalable and cost-effective solution.”

—Geir Erland Fladby, System Administrator, Vitec AutoData

Business challenge

Wholesalers, retailers and buyers of automotive spare parts wanted new ways to connect with Vitec AutoData’s platform—how could the company satisfy customer demands and deliver even better services?

Transformation

To swiftly source replacement parts, automobile repair shops in Norway can connect with manufacturers and wholesalers via a dedicated trading platform run by Vitec AutoData. With demand growing and customer expectations changing, the company wanted to ensure greater scalability while cutting TCO for its core infrastructure.



Geir Erland Fladby
System Administrator

Business benefits

Reduces

total cost of ownership of IT architecture for years to come

Strengthens

the scalability, security and reliability of critical services

Facilitates

easy on-boarding of new clients

Vitec AutoData

Gives clients easier access to critical services while cutting its own TCO

Established in 1979 and headquartered in Oslo, technology company [Vitec AutoData](#) provides hosted and managed IT solutions to importers, wholesalers and retailers of automotive parts and components, offering a full package of solutions across sales, procurement, billing, accounts receivable and accounts payable.

Solution components

- IBM z13s™
- IBM DS8884
- IBM z/VM®
- IBM z/VSE®
- SUSE Linux Enterprise Server





“The performance of our ERP system on Linux on z Systems is great, and the stability is exceptional.”

—Shivanand Bhavikatti, Divisional Head, IT Services, Networking & IBM Mainframe Project, KEONICS

Business challenge

KEONICS is on a mission to bring world-class infrastructure and IT knowledge to the state of Karnataka, India. As a government organization, it's vital for KEONICS to get the best value for money.

Transformation

To support a new ERP system and maximize the value of existing investments, KEONICS introduced Linux alongside IBM® z/OS® on its IBM z Systems® server. The organization has since added a digital learning platform to this Linux environment, which offers accelerated deployment and an estimated 50 percent cost saving versus alternative platforms.

Business benefits

Robust

z Systems technologies ensure reliable operations at all times

Flexible

platform that reduces time to market for new initiatives

50%

cost-saving by embracing open source technologies

KEONICS

Getting the best of both worlds with Linux on IBM z Systems

[KEONICS](#) (Karnataka State Electronics Development Corporation Ltd) has played a significant role in India's IT revolution. With its focus on providing world-class infrastructure services for the electronics- and IT-related industries in the state of Karnataka, KEONICS offers hosted and managed ERP platforms and web portals, software development, IT consultancy, IT training and networking components. Additionally, the organization provides education to local communities through a network of 265 training centers, helping spread the economic benefits of IT throughout the region.

Solution components

- Linux on z Systems®
- SUSE Linux Enterprise Server for z Systems





“s IT Solutions Austria is now able to offer Erste Group a future-ready, fully integrated messaging system.”

—Andreas Goerlich, Senior Operations Manager
SWIFT, s IT Solutions Austria

Business challenge

Spotting an opportunity to reduce costs and simplify intragroup messaging, s IT Solutions Austria set out to consolidate management of SWIFT messages for Erste Group without compromising on security.

Transformation

Today, s IT Solutions Austria relies on a single SWIFT message handling solution, combining INTERCOPE's BOX, IBM® MQ and DB2® solutions, running on IBM z Systems®. As a result, the company makes 65 percent cost savings, increases control and reduces risk, supporting reliable financial services.

Business benefits

65%

saving on costs for SWIFT infrastructure licenses, connectivity and maintenance

Reduces

risk with future-proof, highly secure solution that offers greater control

Supports

reliable financial services by ensuring rapid exchange of SWIFT messages

s IT Solutions Austria

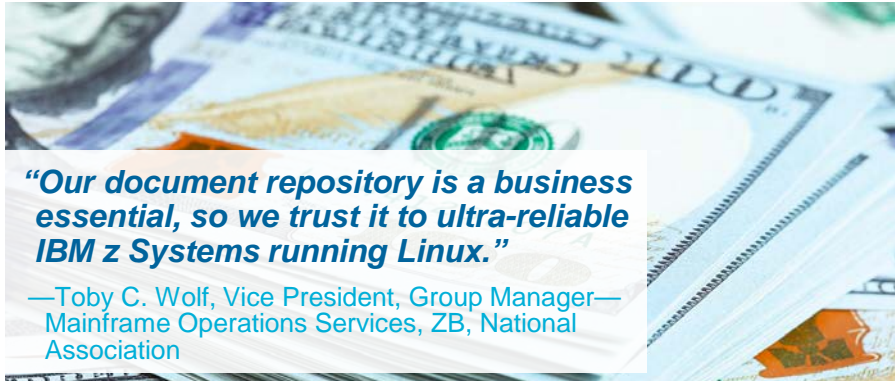
Simplifying for success with an integrated messaging solution that works across borders

[s IT Solutions Austria](#) is the IT services provider for [Erste Group](#), one of the largest financial services providers in the Eastern part of the European Union in terms of clients and total assets. Erste Group's key business is retail financial services, covering the entire spectrum from lending, deposit and investment products to current accounts and credit cards.

Solution components

- IBM DB2® for z/OS®
- IBM Global Technology Services® – Technical Support Services
- IBM MQ
- IBM z/OS
- IBM z13®
- Linux on z Systems





“Our document repository is a business essential, so we trust it to ultra-reliable IBM z Systems running Linux.”

—Toby C. Wolf, Vice President, Group Manager—
Mainframe Operations Services, ZB, National Association

Business challenge

ZB, National Association’s staff need reliable access to the company’s full document repository. But at 30 million documents and growing fast, how could the organization ensure future reliability?

Transformation

ZB, National Association addressed the risk that its repository of millions documents would stop employees working effectively as the contents grew rapidly. By migrating the system to an enterprise-grade platform for Linux, the company gained a future-proof solution for secure and manageable document storage.

Business benefits

Cuts

risk of disruption to employees’ work by protect

Headroom

for growth created by moving systems to the mainframe

66% cost saving

on hosting document repository, boosting efficiency

ZB, National Association

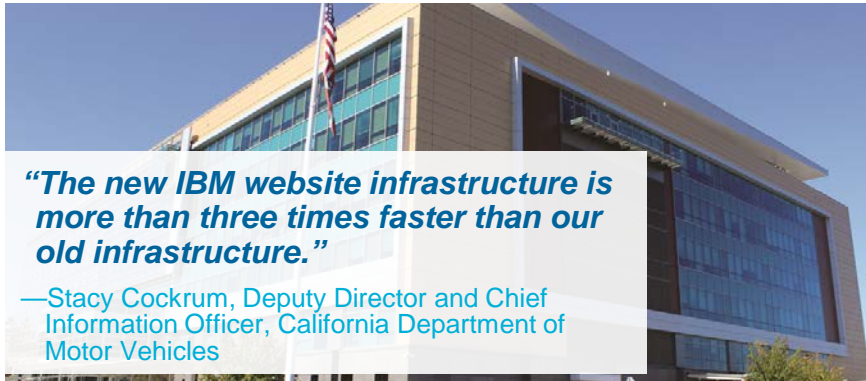
Investing in peace of mind with Linux on IBM z Systems

[ZB, National Association](#) of Salt Lake City, UT, operates more than 480 fullservice banking offices in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah and Washington. This geographically dispersed company focuses on providing truly local management teams with community identities, supported by ferociously efficient IT services based at the head office.

Solution components

- IBM Z[®] server
- IBM Integrated Facility for Linux (IFL)
- IBM z/VM
- Red Hat Enterprise Linux





“The new IBM website infrastructure is more than three times faster than our old infrastructure.”

—Stacy Cockrum, Deputy Director and Chief Information Officer, California Department of Motor Vehicles

Business challenge

With AB 60 legislation allowing undocumented residents to apply for driver licenses fast coming into law, DMV was concerned its dated website would buckle under the pressure of millions of new users.



Stacy Cockrum
Deputy Director and Chief Information Officer, California Department of Motor Vehicles

Transformation

IBM, the CDT and DMV worked together to migrate the website to Linux on the IBM z Systems platform. The three-times-faster solution effortlessly handled the surge and provides a completely stable service.

Business benefits

Achieved

go-live within very tight deadline

3x faster

than the previous website infrastructure

Increases

DMV staff productivity by removing maintenance overheads

California DMV

California DMV helps the state implement AB 60 for safer roads

The [California Department of Motor Vehicles](#) (DMV) is a state agency that registers motor vehicles, and issues and revokes driver's licenses. It collects approximately USD 7.46 billion in revenues annually, employs more than 9,000 people, and oversees about 33 million registered vehicles and 25 million licensed drivers.



Solution components

- IBM Integration Bus
- IBM Global Technology Services
- IBM WebSphere® Portal Server
- IBM Z server



"You can sum up moving to z Systems in one sentence: it's easy and cost-effective, so go ahead."

—Tim Simpson, IT Infrastructure Manager, Dundee City Council

Business challenge

"We were facing major problems. We had an overflowing data center, so we could not physically get any more power into the building without spending significant sums of money, and the air conditioning was grossly overloaded."

Transformation

Dundee City Council knew there had to be a simpler, more efficient way to guarantee 24/7 availability for the Oracle Database environment supporting its critical services than its unreliable distributed server-based approach. Embracing a mainframe strategy proved to be the answer, delivering infrastructure simplification and exceptional reliability at low-cost.

Business benefits

Proven 24/7 availability

over 10-year period, ensuring citizens can always access services

10-fold workload increase

managed by the same number of employees, improving efficiency

Lowers energy costs

enabling lower environmental impact and better use of public funding

Dundee City Council

City government discovers the outstanding reliability of Linux on z Systems

Fast-growing enterprises must react quickly to ensure that they can continue to deliver high-quality customer services. "With IBM solutions supporting our mission-critical applications, we can keep the business running smoothly – even as the number of customers and suppliers increases."

Solution components

- IBM Z server
- IBM z/VM
- Oracle Database
- SUSE Linux Enterprise Server
- IBM Global Technology Services





“SAP and IBM z Systems allows us to operate an incredibly streamlined and seamless manufacturing process.”

—Spokesperson, manufacturing company

Business challenge

To keep its US manufacturing business growing in a competitive market, this company must deliver top-quality products, super-fast. How could it meet those high expectations without breaking the bank?

Transformation

With SAP applications running on the IBM mainframe, this manufacturer can deliver high-quality products and responsive service, keeping customers happy and keeping the business on track for profitable growth.

Business benefits

Improves

agility with lightning-fast performance and deep insight into operations

Sharpens

competitiveness, helping maintain market-leading edge

Boosts

profitability by driving tight control over operating costs

Manufacturing company

Focusing on quality and service excellence to outperform low-cost offshoring

This company designs, manufactures and markets industrial electric motors, drives, and mechanical power transmission products. The company sells its products to distributors and original equipment manufacturers in more than 70 countries worldwide.

Solution components

- IBM DB2 for z/OS
- IBM System Storage® DS8870
- IBM z/OS
- IBM z/VM
- IBM z13
- IBM Z server
- SAP Business Suite





“We have improved our capabilities and can take on new customers quicker, supporting rapid growth.”

—Armin Gerhardt, CEO, ABK Systeme

Business challenge

ABK wanted to meet customer demand for faster transfers and maintain excellent service levels while growing rapidly. How could it become ready for real-time mobile-payment processing?

Transformation

ABK Systeme deployed IBM Financial Transaction Manager on IBM z Systems running Linux®, increasing performance and flexibility, and also simplifying system architecture and consolidating workloads.

Business benefits

Supports

the company’s strategy to enable instant payments

Unlocks

potential to serve new customer segments and increase revenue

Reduces

administration and management workload

ABK Systeme GmbH

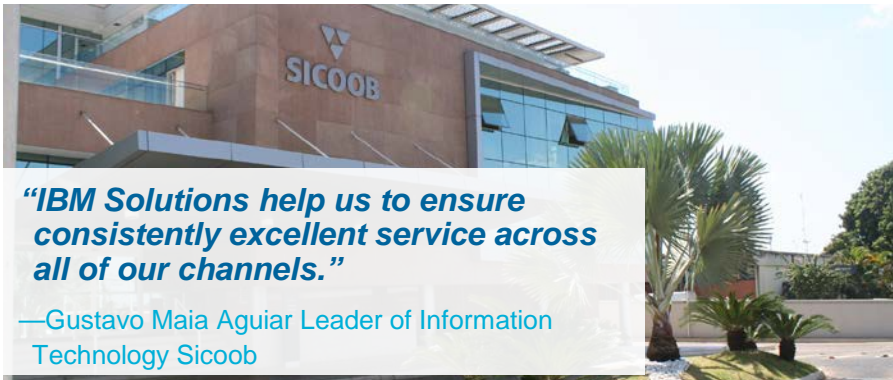
Scaling up transaction performance and getting ready for instant mobile payments

Headquartered in Dreieich, Germany, ABK Systeme GmbH is a leading provider of electronic payments in Europe. The company develops solutions that enable exceptionally secure and rapid payments transfers. ABK Systeme is part of the Paymentgroup and is growing at an average rate of 10 percent per year.



Solution components

- IBM Financial Transaction Manager
- IBM MQ
- IBM DB2 for Linux
- IBM WebSphere Application Server
- IBM Z server
- IBM XIV®
- IBM MobileFirst® Platform
- SUSE Linux Enterprise Server



Business challenge

Growing fast, Brazilian credit union system Sicoob must cope with extra transactions at short notice. How could it combat the increased IT complexity that resulted without impacting service quality?

Transformation

Selecting IBM z Systems as its strategic platform, Sicoob migrated and consolidated member databases to IBM DB2 LUW with BLU Acceleration IBM TS3100 Tape Library Express running in a Linux environment on the mainframe.

Business benefits

Supports

business growth at a larger scale to respond to market changes

Up to 20x

faster analytics leads to real-time actions

35%

database compression reduces storage costs

Sicoob

Unleashing new growth and operational efficiency with an infrastructure transformation

Credit Unions System for Brazil (Sicoob) is the largest credit union system in Brazil, offering banking and credit services to more than 2.5 million people. Sicoob’s customers are also its owners, so the financial returns benefit their communities rather than enriching shareholders.

Solution components

- IBM DB2 with BLU Acceleration®
- IBM Z server
- IBM z/VM
- SUSE Linux





Prompted by generation replacement in personnel, CSC's IT reengineering project accelerated the company's overall transformation.

Business challenge

China Steel Corp. (CSC) saw the turn of generations as an opportunity to upgrade its IT environment, which was an integral part of its corporate transformation, and to find better ways to tap into its rich historical data. The reengineering was a huge task, involving the rewrite of nearly 200 applications. The job was particularly daunting because the COBOL-to-Java mapping could not interrupt any of the company's day-to-day operations.

Transformation

By deploying an open systems platform on the Linux operating system, CSC can now carry out real-time analytics. For example, using decades of production and transaction data to simulate steel prices, the solution can create a pricing model for production based on fuzzy analytics. By comparing current and historical conditions, CSC can optimize pricing, better manage supply chain and grow revenue.

Business benefits

15% reduction in expenses

by limiting software licensing costs, which helps reduce the company's total cost of ownership (TCO)

60x increase in system speed

reducing to 10 seconds operations that previously took as long as 10 minutes to complete

40% increase in efficiency

of hardware through increased data size, allowing the solution to process five million records daily

China Steel Corp.

Upgrading the IT environment with real-time analytics

China Steel Corp. (CSC) is the largest steel company in Taiwan, with more than a 50 percent share of the domestic market. With annual production in terms of crude steel around 10 million tons, CSC produces a range of products that includes plates, bars, wire rods, and hot and cold rolled coils.



Solution components

- IBM DB2 Analytics Accelerator
- IBM Global Technology Services – Systems Services
- IBM Integrated Facility for Linux
- IBM Z server



“We now deliver innovative financial services and avoid, or instantly recover from, system failures, promoting business continuity and increasing customer satisfaction.”

—Masahiko Kato, division head of IT and system general division 1 at Mizuho

Business challenge

Mizuho Bank, Ltd.'s aging system lacked the flexibility and support necessary to meet its goals of delivering an improved customer experience through its services and enhancing business continuity while decreasing IT costs.

Transformation

Designed for continuity and scalability, IBM z Systems technology running a Linux operating system and an IBM DB2 data server provided the foundation Mizuho needed for its Linux environment to develop and deploy new services faster and more reliably.

Business benefits

Mizuho updated online and mobile applications, keeping user satisfaction high and expanding its online presence by **gaining scalability and sustainability** while **reducing overall costs.**

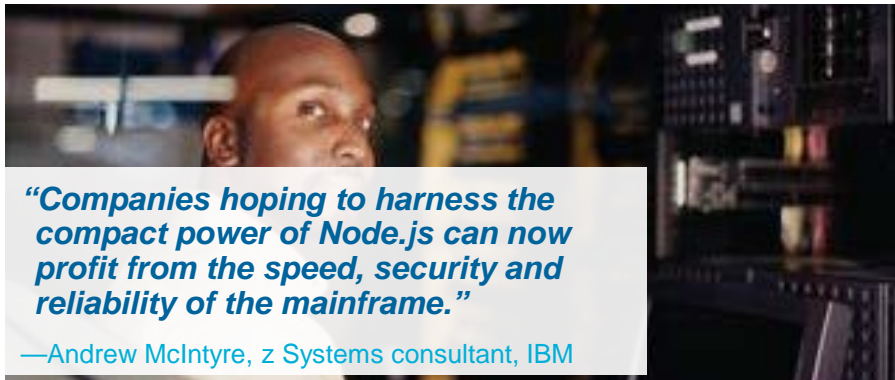
Mizuho Bank, Ltd. IBM z Systems technology running a Linux operating system helps bank reduce operating costs

Mizuho takes banking into the future for its 10 million plus customers with innovative IBM z Systems technology running a Linux operating system and a DB2 data server. Designed for reliability, the solution helps the bank improve the customer experience, reducing IT expenses along the way.

Solution components

- IBM DB2 High-Availability Disaster Recovery
- IBM InfoSphere® Data Replication (Q Replication)
- IBM z Systems running Linux
- SUSE Linux Enterprise Server for z System
- IBM Z server
- IBM DB2 for Linux





“Companies hoping to harness the compact power of Node.js can now profit from the speed, security and reliability of the mainframe.”

—Andrew McIntyre, z Systems consultant, IBM

Business challenge

To keep pace with consumer demand for the latest mobile technology, companies want to develop secure cutting-edge applications at high speed—and without major investments in extra infrastructure.

Transformation

Previously, enterprises had no way to harness the cutting-edge power of Node.js technology alongside systems of record on their mainframes. Thanks to IBM Systems, these firms can now use Node.js to develop or run cutting-edge web and mobile applications while profiting from the outstanding speed and rock-solid reliability of IBM mainframes.

Business benefits

Delivers

excellent performance, especially for apps that hook back into enterprise systems

Enables

co-location of Node.js server apps with data on z/OS, cutting access latency

Leverages

trusted landscape to maximize security and uptime for critical Node.js apps

IBM Systems

Combining modern web development with the security, reliability and performance of the IBM mainframe

IBM Systems creates solutions and middleware to serve the constantly changing needs of commercial and government organizations on every continent.

Solution components

- IBM DB2 for z/OS
- IBM SDK for Node.js
- IBM z Systems
- IBM Integrated Facility for Linux processors





“Without a doubt, our SAP and IBM solutions provide the headroom we need to accommodate significant business growth.”

—Spokesperson, major utility organization

Business challenge

To combat lengthening response times for its mission-critical SAP business systems, this major utility targeted a scalable IT infrastructure to support its end-to-end processes.

Transformation

Many of this major utility's processes, including finance, human resources, inventory and fleet management, depend on SAP applications. To keep up with increasing demand on its SAP solutions, the organization deployed a new IT infrastructure – enabling critical SAP application updates, reducing response times and helping it to manage its growing business effectively.

Business benefits

50% reduction

in SAP application response times

8x faster

generation of external audit reports,
ensuring regulatory compliance

8x faster

monthly pay slip calculations

Major utility organization

Enabling business growth for all services with fast, robust mainframe platform for SAP applications

Fast-growing enterprises must react quickly to ensure that they can continue to deliver high-quality customer services. “With IBM solutions supporting our mission-critical applications, we can keep the business running smoothly – even as the number of customers and suppliers increases.”

Solution components

- IBM Z server
- IBM System Storage DS8870
- IBM DB2 10 for z/OS
- IBM z/OS V1.13
- Red Hat Enterprise Linux
- IBM Lab Services
- IBM Migration Services
- SAP ERP, SAP BW, SAP SRM, SAP EP, SAP PI





Business challenge:

The primary focus of electricity suppliers is to have just enough electrical capacity distributed to customers. But because electricity cannot be stored in the same manner as oil or gas, excessive surplus or deficit can cause problems for electrical grid and supply companies. Accurate calculations based on analysis of customer usage are the baseline for providing the right amount of electricity to customers, minimizing the potential for both deficits and surpluses.

The transformation:

The provider helps electricity companies better perform calculations with a multi-faceted solution that facilitates compliance with EU regulations. The solution collects information in real time from meters, sensors and other intelligent devices then analyzes that data to provide electricity companies with up-to-the-minute insights on customer power usage.

Business benefits

14.7% increase

in the net income of the largest electricity supplier in Slovenia after using a core set of applications

Analyzes changes

in electric company grid metering data to determine if new investments are necessary

Provides precise

buy and sell insights based on customer electricity usage data

IT services provider

Develops a solution to help companies manage electricity supply and demand

Solution components

- IBM Cognos® Business Intelligence
- IBM Content Manager on Demand for z/OS
- IBM DB2® Analytics Accelerator
- IBM Maximo® Asset Management
- IBM PureData™ System for Analytics
- IBM WebSphere





“Thanks to IBM, we enhanced our ability to measure and monitor business performance against set targets using reliable KPIs.”

—Kenya Power

Business challenge

With scattered data in disparate systems, Kenya Power and Lighting Co. Ltd. lacked an efficient data-warehousing and reporting solution, which caused poor data quality and a high incidence of fraudulent energy use.

Transformation

Kenya Power implemented IBM zEnterprise Analytics System 9710 solution, IBM Information Management and IBM Business Analytics software to build an integrated data-warehousing and analytics solution. IBM Global Business Services – Business Consulting Services delivered KPI replacement.

Business benefits

Consolidates its IT assets

to better support business operation

Achieves better control

of business performance

Meets requirements

established by the government

Kenya Power and Lighting Co. Ltd. Taped IBM to implement an integrated data-warehousing and analytics solution

Kenya Power is the sole electricity provider for more than 2.2 million customers throughout the country. With a goal to provide universal electricity access by 2020, Kenya Power implemented the IBM Mainframe for its mission-critical systems, significantly improving reliability with fewer unscheduled outages.

Solution components

- IBM Z server
- IBM System Storage® DS8870
- IBM InfoSphere DataStage®
- IBM InfoSphere QualityStage®
- IBM Cognos Business Intelligence
- IBM SPSS® Modeler
- IBM DB2 for z/OS
- IBM Global Business Services



"The great thing about IBM GDPS in combination with SUSE Linux Enterprise Server and all Linux workloads including Oracle Database software is that it just works reliably."

—Oliver Röttinger, System Programmer and Administrator z/VM and Linux on z Systems, Sparda-Datenverarbeitung eG

Business challenge

Sparda-Datenverarbeitung eG (SDV) needed a reliable and cost-efficient platform with minimum downtime to operate large databases and state-of-the-art software for banks.

Transformation

Geographically Dispersed Parallel Sysplex™ (GDPS®) is an IBM z/OS feature that provides a coordinated Disaster Recovery solution for customers running a multi-tiered architecture including the IBM z/VM hypervisor, Linux on System z and z/OS on System z. IBM GDPS enables SDV to move Linux services from one physical IBM System z server to another within seconds, helping to minimize failover and recovery time.

Business benefits

Offers excellent availability

by providing automated failover within seconds

Reduces total cost of ownership

by about 50%, cuts administration effort and enables a team of three to manage 120 servers

Accelerates deployment of new systems

Sparda-Datenverarbeitung eG

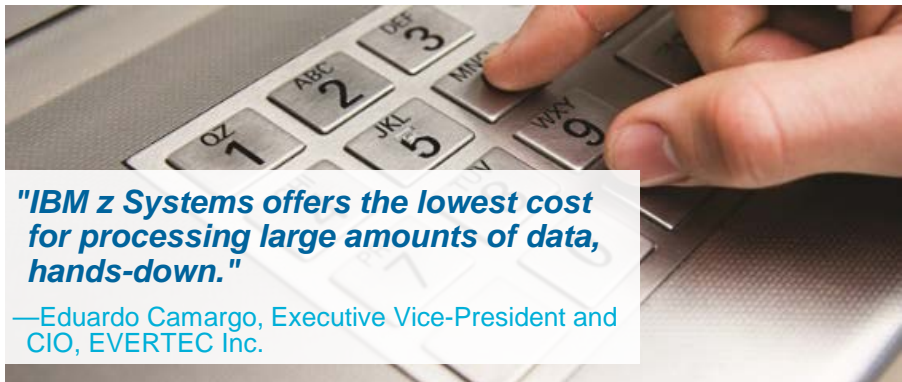
Leveraging a world-class enterprise computing system to ensure 24x7 customer service

[Sparda-Datenverarbeitung eG](#) deployed two IBM z Systems with IBM z/VM virtualization technology to consolidate Oracle Database and application servers on SUSE Linux Enterprise Server.



Solution components

- IBM z/OS
- IBM z/VM
- IBM DB2 for Linux
- IBM WebSphere Application Server
- IBM Tivoli® Storage Manager
- IBM Tivoli System Automation for Multiplatforms
- IBM Tivoli System Automation for z/OS
- Oracle Database
- SUSE Linux Enterprise Server



"IBM z Systems offers the lowest cost for processing large amounts of data, hands-down."

—Eduardo Camargo, Executive Vice-President and CIO, EVERTEC Inc.

Business challenge

EVERTEC processes billions of financial transactions annually and must ensure 24/7 responsiveness and availability for its systems—or risk failing to provide customers with access to key services. EVERTEC used a distributed platform to support a number of its transaction processing systems. As the company's payment network expanded over the years, the expense and effort of maintaining the under-lying computing infrastructure increased substantially.

Transformation

EVERTEC migrated core Oracle databases supporting its transaction processing systems to a virtualized SUSE Linux Enterprise Server environment, running on an IBM z Systems server. The company has currently migrated approximately 40 databases to the z Systems, with plans to make z System the strategic platform for all Oracle databases.

Business benefits

Offers high performance

and near-total availability to support transaction processing

Reduces costs

space, and energy use by consolidating from multiple physical servers to a virtualized environment

Takes hours, not days

to provision new workloads, improving responsiveness to business demands

EVERTEC

Ensures leaner, faster processing for billions of transactions

EVERTEC trusts in the leading reliability and security of the IBM® z Systems server running SUSE Linux Enterprise Server for z Systems to support key financial systems and Oracle databases.

Solution components

- IBM Z server
- IBM z/OS
- IBM z/VM
- IBM z/VSE
- Oracle Database
- SUSE Linux Enterprise Server for z Systems





Business challenge

With the increasing availability and convenience of ATM and online banking, traditional banks must prove to their customers that their brick-and-mortar banks are still relevant and can provide the products and services that they want. To transform its customer interactions, this large bank in Italy needed to reach its customers with relevant services promoted and delivered over any channel.

Transformation

An integrated analytics and campaign management solution generates multistep and omnichannel marketing campaigns to keep and attract customers. The solutions help the bank learn how its customers interact with it, allowing it to provide relevant product and service offers over customers' preferred channels. The solutions also target both the bank's most valuable customers and those likely to churn with personalized retention campaigns.

Business benefits

5x better outcomes

by using a targeted rather than random retention campaign

Nearly unlimited

campaign generation, replacing a maximum of 30 campaigns a year

Enables analysis

of campaign success in near-real time to allow follow-on and multi-step campaigns

Banca Carige

Providing superior customer service by launching innovative mobile services on a secure platform

Banca Carige built an analytics environment and a new mobile banking service using IBM software on IBM Z mainframes, which provide round-the-clock availability and high security. "The key value for our business is that the most important services can be managed together on a consistent, stable and highly secure platform that offers enormous scalability and performance."



Solution components

- IBM WebSphere Application Server
- IBM MobileFirst Platform Foundation
- IBM DB2 for z/OS
- IBM DB2 Analytics Accelerator for z/OS
- IBM Z running z/OS
- IBM Global Business



“Whereas previously much of their time was taken up with dealing with user complaints and crashes to the SAL application, now we can focus on other more productive work and simply trust the IBM solution to consistently perform.”

—Laila Binti Abdul Majid, Chief Assistant Director at National Registration Department of Malaysia

Business challenge

The National Registration Department of Malaysia custom-built an innovative application – Statistics and Data Extraction Request Management System (SAL) – to automatically manage requests for statistics and data extraction, but found its existing infrastructure lacked the power to reliably support it. Access issues, slow response times and crashes led to high numbers of user complaints, leading to some employees refusing to use the system. This prevented critical information being distributed, uploaded and downloaded for those who needed it urgently.

Solution

By selecting an IBM z Systems server running the z/OS operating system to handle existing workload, an IBM Integrated Facility for Linux (IFL) engine was activated to provide a highly available environment for new SUSE Linux Enterprise Server workloads. The entire project was completed on time, within four months, and with the technical implementation conducted in just two weeks.

Business benefits

Boosting employee productivity by ~50%

dramatically improved response times, increasing utilization

Gained a highly reliable, stable platform

making it possible to offer the SAL application 24/7

Significant cost savings

by moving to open source technology

National Registration Department of Malaysia

Supporting super-reliable access to business-critical applications with Linux on IBM z Systems

Established in 1948, the National Registration Department of Malaysia (Jabatan Pendaftaran Negara Malaysia, or JPN) is the government agency responsible for registering important demographic events such as births, deaths, adoptions, marriages and divorces; and issues identity cards to those eligible. Employing over 3,000 people, JPN is headquartered in Putrajaya, Malaysia.

Solution components

- IBM z Systems
- IBM Integrated Facility for Linux
- IBM z/OS
- SUSE Enterprise Linux Server



Embasa improves data flows with SAP and IBM

The need:

The company needed to find a high-performance, cost-effective way to introduce new software while continuing with the tried and trusted database solution. Its proposed operational software package, SAP, runs on the Linux operating system, and Embasa was keen to avoid introducing additional server platforms and a complex IT landscape.

The solution:

To support the new workload, Embasa upgraded its IT environment to an IBM z Systems server with seven central processors to run z/OS workload, ... to run specific DB2 transactions, and six IFL processors to support the SUSE Linux Enterprise Server hosted on z/VM.

Benefits:

- Consolidating multiple workloads to z Systems has avoided the need to add smaller systems to the data center, making space available while cutting energy and cooling requirements
- Internal connections between applications and database eliminate external cabling, network switches and power supplies, further simplifying the system landscape, which is now easier to understand and maintain

The ability to run the Linux operating system alongside IBM z/OS made the platform a strong candidate for the new applications.

This commercially attractive solution gave Embasa the confidence to go ahead with the implementation of SAP applications on Linux on the IBM z Systems platform.



European railway operator

Boosting rail ticket sales to better compete against low-cost travel providers

The need:

To compete against cut-price airlines and low-cost coach operators, this European rail operator looked to create an engaging sales experience combined with flexible travel and ticketing options.

The solution:

The operator enhanced its web and mobile experience by streamlining processing of customer queries, enabling real-time service updates for travelers, and creating flexible journey-planner solutions.

All transactions for ticket sales – from online and mobile to sales points at stations and travel agencies – are managed on the EC12 mainframe using IBM WebSphere Application Server for z/OS. Once the tickets have been booked and created within the z/OS environment, payment transactions are pushed to WebSphere Application Server on Linux for System z®, still on the same physical EC12 mainframe, which handles all the necessary security checks and brokers the transactions with external payment processor companies.

Benefit:

Sleek, modern customer interfaces that offer a wider range of travel options have boosted ticket sales by a double-digit percentage, winning revenue back from competitors and strengthening profitability.

“To support online and mobile offerings - which we know from experience can generate huge transaction volumes – we needed to ensure the highest possible levels of system availability, performance and security.

We chose to implement an entirely IBM-based solution, to take advantage of the most advanced features in terms of data management and security.”

—A spokesperson



Baldor Electric Company

The need:

Following the success of a major consolidation project, Baldor Electric wanted to continue to drive down operational costs in its virtualized SAP Business Suite software environment.

The solution:

Baldor runs its core SAP landscape on IBM z Systems. Its IBM DB2 for z/OS databases run in IBM z/OS partitions, while 70 virtual servers under z/VM provide Linux environments that act as SAP application servers. Baldor migrated data to the IBM System Storage DS8800 platform.

Benefits:

- Lowered costs and cut complexity by eliminating 200 servers
- Cut energy costs by more than 60%
- Reduced time taken to generate sales reports from five hours to 13 seconds
- Cut IT administration costs as a proportion of sales revenue by 50%

“We saw that our z Systems platform had never suffered a hardware outage.

Our Linux environments, on z Systems and on other servers, were similarly robust from an operating system perspective.”

—Mark Shackelford, Vice President of Information Services, Baldor Electric



University of North Carolina: Enabling health informatics

The need:

The University of North Carolina (UNC) Health Care System needed to create a consolidated view of patient information that could better serve the diverse needs of varied user groups.

The solution:

UNC worked with IBM to create a robust, closely governed data warehouse solution that unifies multiple data stores, making it possible to quickly and easily access data and transform it into useful information.

Benefits:

- Delivers complex search results spanning multiple information repositories in minutes instead of the weeks or even months required for manual searches
- Provides a single view of data across the organization
- Breaks down information silos to enable new lines of inquiry
- Enables governance of user groups, storage and access to optimize user benefits and ROI
- Establishes procedures to disseminate information throughout the organization

“IBM brought us a structure that we didn’t have.

The ready availability of information changes the way people ask questions and think about the problem on a fundamental level.”

—Dr. Donald Spencer, associate director of medical informatics, UNC Health Care System



The Engines of Progress: New York Municipal Shared Services Cloud

Through the cloud, New York municipalities plan to attract new development and growth across the state while cutting costs, saving time and reducing waste.

And the IBM mainframe is the only platform New York trusts to host that cloud.



www.youtube.com/watch?v=1W2b1QFopOc

In addition to its time-tested scalability, reliability and security, it offers the lowest total cost of ownership — supporting the state as it strives for reduced spending and a smarter, future-ready IT infrastructure.

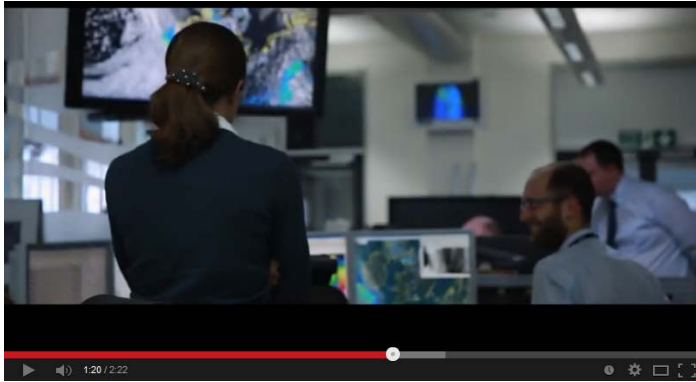
"Change starts by asking the difficult questions and finding innovative solutions. Cloud isn't just for IT anymore; it's for the business."

—Wil LaBossier, President, Software Consulting Associates



The Engines of Progress: Met Office develops techniques for modern forecasting

The Met Office, United Kingdom's national weather service, is depended upon the world over for reliable weather predictions, especially when people are being threatened by severe weather conditions. And there's little room for error.



www.youtube.com/watch?v=4A0gqWkrK0c

So while people depend on Met Office for reliable weather forecasts, Met Office depends on the mainframe, processing and outputting forecast reports quickly and without error.

"It's incredibly important that the customers trust what they've been given - trust the accuracy, trust the reliability..."

—Phil Evans, Director of Government Services,
Met Office



The Engines of Progress: Business Connexion achieves the impossible

Business Connexion, Africa's largest IT service provider has set out to achieve the impossible through technology.



www.youtube.com/watch?v=bqN1_6gviGg&feature=youtu.be

And that's why it turned to the mainframe, enabling it to build and deploy end-to-end cloud offerings for customers across all of Africa.

With the aid of the mainframe, Business Connexion can give access to services like Internet, banking and telemedicine -- and empower prosperity across a disconnected continent.

“Scalability is probably the most important [for our customers] – to actually grow as the business grows.”

—Jacques Loubser, General Manager, Business Connexion



RESOURCES

Search our publications and digital assets

- Allianz Australia: <https://www.redhat.com/en/resources/allianz-australia-migrates-to-red-hat-and-jboss> (Sep 2009)
- Bank of New Zealand: <http://www.redhat.com/de/about/press-releases/bnz> (Feb 2009)
- Banco Pastor: <https://www.redhat.com/en/about/press-releases/banco-pastor> (2009)
- Salt River Project: http://www.redhat.com/f/pdf/customers/SRP_CaseStudy_web.pdf (2008)



SUSE Case Studies / Videos

www.suse.com/success/#suselinuxenterpriseserverforsystemz

Customer Success Stories

Geo



Industry



SUSE Linux Enterprise Server for z Systems and Linux

Clear Filters

- C&A: <https://www.suse.com/success/stories/c-and-a> (Jun 2017)
- KEONICS: https://www.suse.com/docrep/documents/sl3htsovpr/keonics_cs.pdf (Nov 2016)
- ICU IT Services: https://www.suse.com/docrep/documents/d0i997nhgx/icu_it_services_ss.pdf (May 2016)
- Vitec AutoData AS: https://www.suse.com/docrep/documents/9s4sjsp29q/autodata_norge_as.pdf (Feb 2012); video: <https://www.youtube.com/watch?v=8pwYrWMPbRQ> (Jul 2015)
- Sparda-Datenverarbeitung eG: https://www.suse.com/docrep/documents/8cw2w5tdnq/sparda_datenverarbeitung_eg_case_study.pdf (Jul 2015)
- Halkbank Turkey: https://www.suse.com/docrep/documents/xvbozdzzxj/halkbank_turkey_success_story.pdf (May 2013); video: https://www.youtube.com/watch?v=6sD_aEPRKHI (May 2013)
- eThekwini Municipality: <https://www.suse.com/success/stories/ethekwini-municipality.html> (Nov 2013)
- NWK: https://www.suse.com/en-gb/docrep/documents/9vpbme9olg/nwk_success_story_ee.pdf (Jan 2013)
- Baldor Electric: https://www.suse.com/docrep/documents/e62v58s1ge/baldor_electric_case_study.pdf (Mar 2013)
- Business Connexion: https://www.suse.com/docrep/documents/cf7uq9hulp/business_connexion.pdf
- Deutsche Rentenversicherung: https://www.suse.com/docrep/documents/q2hdcn7vsh/deutsche_rentenversicherung.pdf
- Dundee City Council: https://www.suse.com/docrep/documents/wvhlogf37z/dundee_city_council.pdf

... and more



Designed for competitive advantage

The Strengths

Operational efficiency

incl. co-location advantages

Simplicity, high performance and same arrangements for administration

Qualities of service (RAS)

Designed to avoid failures and near-continuous availability and DR solutions

Security

incl. pervasive encryption

Pervasive encryption enablement, RACF for z/VM and EAL 5+ certification

Economic benefits

Life-cycle management cost can be considerably less vs x86 or public clouds