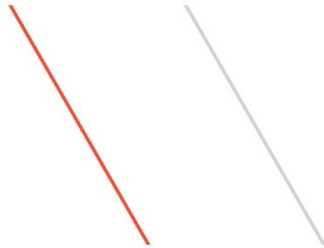


IBM z Systems

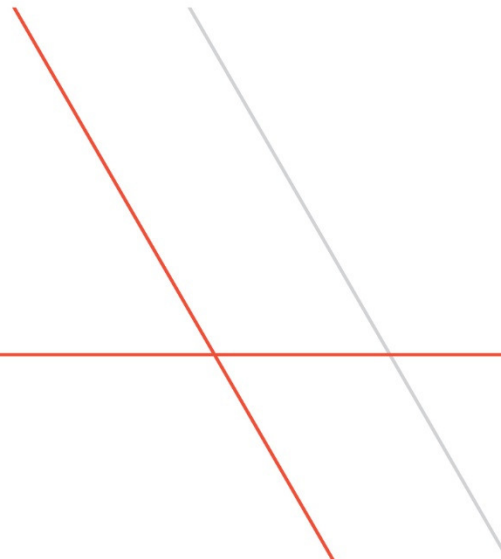


Q2 z Systems software announcements

Accelerate the mobile economy with cloud, mobile, and analytics solutions

Ray Jones, VP, z Systems software sales

June 2015



Core z Systems software shows value with z13

Up to **24%**

Reduction in CPU per transaction for CICS VSAM workload

Up to **31%**

Increase in internal throughput rate for CICS VSAM workload

Up to **28%**

Reduction in CPU per transaction for CICS – DB2 workload

Up to **18%**

Improvement in rate and transaction cost for WebSphere MQ

Up to **39%**

Increase in internal throughput rate for CICS – DB2 workload



Java 8 and z13: IBM SDK for z/OS, Java Tech. Edition, Version 8



34 new language features

including Lambdas and virtual extension methods

- **Improved crypto performance for IBMJCE** with up -to 4x improvement to Public Key using ECC
- **Significantly improved application ramp-up** with up-to 50% less CPU to ramp-up to steady-state
- **Improved Monitoring with JMX beans** for precise CPU-time monitoring
- **Enhancements to JZOS Toolkit for Java batch**



Test Drive your mobile strategy: Enterprise Mobile Test Drive



Partner with IBM resources to work on Mobile Test Drive of your choice:

- Building a mobile front end for an existing 3270 application,
- Composing new Bluemix mobile app connected to back end system of record
- Integrating an industry starter app into existing back end
- Leveraging API enablement using APIM Management

*Work hand in hand with
IBM mobile specialists*

*Leverage best practices
and subject matter
expertise*

*Learn what others are
doing to accelerate time to
value*



Comprehensive test automation for mobile applications



IBM Rational Test Workbench V8.7

Build intelligent and interconnected enterprise applications that can be deployed on traditional and cloud infrastructures

Deliver test automation for all types of applications including mobile

***New support for
IPIC virtualization
and PL/1***



Mainframe Mobile App Throwdown

Recognizing z Systems clients & business partners excelling in mobile on z



Branko Slivarić
General Manager



Steve Groom
CEO



Ganesh Mahadevan
Senior Consultant

Business Partners



Michele Dankowski and Team
Software Engineer Director



Tomasz Cieplak
Senior System Engineer



Kaan Araf
Application Architect



Gurcan Yavuz & Onder Ozcan
Solution Architects

Clients



Enhance your z/OS IT operations environment: IBM Operations Analytics for z Systems V2.1



Insight into started tasks and networks

Support for performance metrics from SMF records for DB2, CICS, IMS and WebSphere MQ
Domain insight for z/OS networks

Real time alerts

Alerts based on specified alerts and trigger actions

Hadoop integration

Integration of IBM InfoSphere BigInsights Hadoop, which provides an efficient method for searching data in long-term storage

Previously known as SmartCloud Analytics



z Systems Community Cloud



Free Linux on z Systems Virtual Machine

Develop, port, and test on your own z Systems

Cloud management with IBM Wave for z/VM and Cloud Manager for Open Stack

4 Clicks and 5 minutes to your own virtual machine

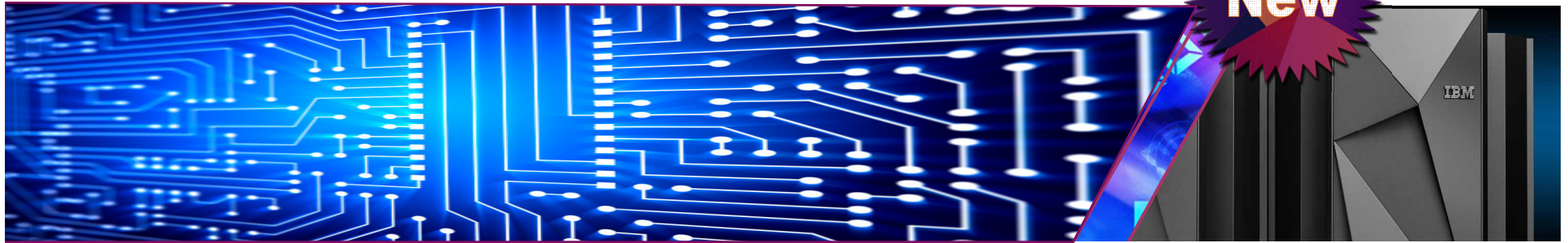
Reinvent business operations: IBM Operational Decision Manager for z/OS, V8.7.1



Improved deployment options, authoring experiences, and operational diagnostics

- Simpler deployment operations with support for XOM archive management in Decision Center
- Easier and dynamic management of user roles in Decision Center.
- Improved change management and governance allowing business users to create simulations and report outcome all within validation activities.
- More control over when diagnostic information is captured and the granularity of that information.
- Rule Execution Servers enabled to operate in WebSphere Application Server environments that use the Liberty profile, which offers major reductions in memory and start time requirements to provide web and RESTFUL services
- Decision-related, user exit capabilities are enabled for the zRule Execution Servers extending the current capabilities of the zRES API for advanced users.

Improve time to value through targeted data collection: IBM Tivoli Decision Support for z/OS, V1.8.2



Cost Optimization

Reduced CPU consumption through improved data collection capability

- New z/OS, DB2, CICS, and IMS key metrics subcomponents
- Easy reporting and analysis

IT Modernization and Skills

Improved time to value and enterprise coverage

- Creation of key metrics collectors simplifying installation and configuration
- Customized script-based data collectors

Significant performance improvements and throughput

New capabilities for query acceleration, operational aspects and data maintenance: DB2 Analytics Accelerator Version 4.1 PTF 5



IBM DB2 Analytics Accelerator V4.1 PTF 5

- Suspending faulty tables from replication
- Improved incremental update performance
 - Parallel Apply
 - Automatic definition of distribution and organization keys
- Accelerator-only tables for In-database transformation and multi-step processing
- Dynamic statement cache support for accelerated queries
- Statement-level monitoring of accelerated queries
- Application-period temporal table support
- Further scalar functions support
- Miscellaneous enhancements



DB2 Analytics Accelerator – Four Usage Scenarios

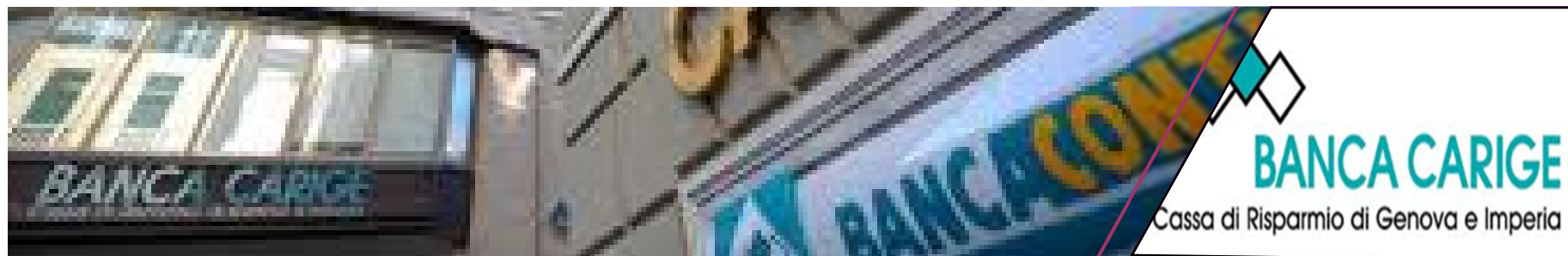
Understand your workload and data:

On average, **70%** of the data that feeds data warehousing and business analytics solutions **originates on the System z platform** (financial information, customer lists, personal records, manufacturing...)



	Where transaction source data is being analyzed today	Use Case	Benefits
1	If the data is analyzed on the mainframe	Rapid Acceleration of Business Critical Queries	Performance improvements and cost reduction while retaining System z security and reliability
2	If the data is offloaded to a distributed data warehouse or data mart	Reduce IT Sprawl for analytics	Simplify and consolidate complex infrastructures, low latency, reliability, security and TCO
3	If the data is not being analyzed yet	Derive business insight from z/OS transaction systems	One integrated, hybrid platform, optimized to run mixed workload. Simplicity and time to value
4	If the analysis is based on a lot of historical data	Improve access to historical data and lower storage costs	Performance improvements and cost reduction

Banca Carige: Maximize value from big data in order to improve product development and customer relationships



1000+ users simultaneously get high-speed analytics on real-time data

*Time cut from **months** to **weeks** to deliver the insight needed to develop and release new marketing campaigns*

Maximizing value from big data

Created a secure analytics platform, to extract true business value from their big data for better business decisions about everything from product development to special offers to promotions

IBM Solution

IBM z Systems
IBM DB2 Analytics Accelerator for z/OS
IBM DB2 for z/OS

IBM DB2 Analytics Accelerator enables us to support the additional workloads that come with business growth without activating more cores on the mainframe.”

Kenya Power: Advanced analytics to better monitor business operations and trends and anticipate future electrical needs



*10 key operational sources to a **single** view of enterprise data*

*Plans to add **one million clients** by end of 2015 and push electricity generation capacity from 2500 megawatts to **5000+ megawatts***

Central repository for various data sources

The analytic capabilities reconcile, correct, and quality-assess the information to provide a consolidated view of Kenya Power's customers. Based on this view, the company will be able to improve the call center experience, better identify customer needs and match new services to meet these needs.

IBM Solution

- IBM z Systems
- IBM DB2 Analytics Accelerator for z/OS
- IBM DB2 for z/OS
- IBM Cognos
- IBM SPSS

“ We can better understand the varying needs of our customers across different regions in Kenya based on customer buying behavior or manage the power grids more efficiently in specific areas during certain times of the day.”

Major Brazilian utility organization: Enabling business growth for all services with fast, robust mainframe platform for SAP applications



*Reduced response times for key SAP applications by an average of **50%** enabling it to manage key compliance and human resources processes up to **8X** faster.*

Managing new suppliers and customers without impacting service quality

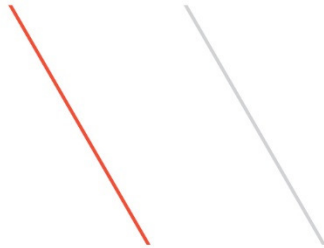
Migrated its SAP landscape to z Systems to provide the scalability, performance, and availability to grow without harming service quality

IBM Solution

IBM z System
IBM DB2 for z/OS

***“...Greater responsiveness for mission-critical business systems, combined with the improvements that we have seen in batch processing, enables our employees to work at peak efficiency*”**

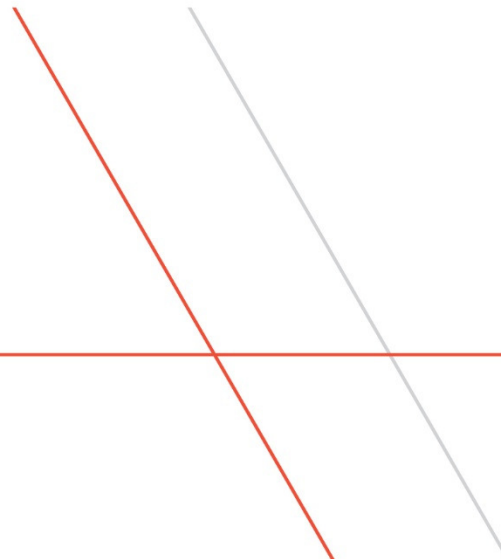
IBM z Systems



Q2 z Systems announcements

Linux on IBM z Systems

Jerry Hosch, z Systems Marketing Offering Manager
June 2015



Linux on IBM z Systems

The enterprise grade Linux solution

Infrastructure matters



Linux on z Systems

- Efficient - Scalable - Available - Reliable - Secure -

Outstanding Virtualization technologies and infrastructure components

IBM GDPS® Virtual Appliance

Continuous availability & Disaster recovery



IBM Spectrum Scale™
(formerly IBM GPFS™)

Clustered file system for performance, reliability and availability & **Shared and automated storage infrastructure**



IBM Infrastructure Suite

Visibility, control and automation

IBM Wave for z/VM

Intuitive virtualization management

IBM z/VM

Virtualization with efficiency at scale

IBM z13

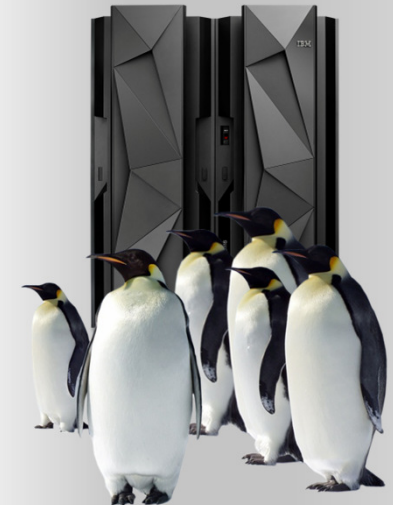
Unmatched server technology & capacity



IBM Wave for z/VM (IBM Wave) *Version 1.2*



- Announcement includes new functionality and Service Packs delivered since GA of V1.1
 - ☑ Improved Flexible Reporting Capability with many new data points
 - ☑ Easier customization for your site
 - ☑ Improved FCP SCSI device support
 - ☑ Easier to get started with cloud
 - ☑ Easier serviceability and support
 - ☑ Strengthened security and audit
- General Availability on June 19, 2015
- [Webpage](#) , [Demo video](#)



IBM Wave is developed using lean and agile principles, providing enhancements and new function on an ongoing basis. These enhancements are made available via service packs.

IBM Wave for z/VM is delivering against IT virtualization challenges



Drive New Opportunities with Reduced Budgets

View, organize and manage many z/VM system resources in an optimized manner to reduce costs of managing virtual environment

Manage Increased Complexity

Manage highly virtualized environments with a powerful, graphical user interface reducing dependency on expert z/VM skills

Improve Staff Productivity

Reduce time spent on key administrative tasks by up to 95%

Simplify Administration

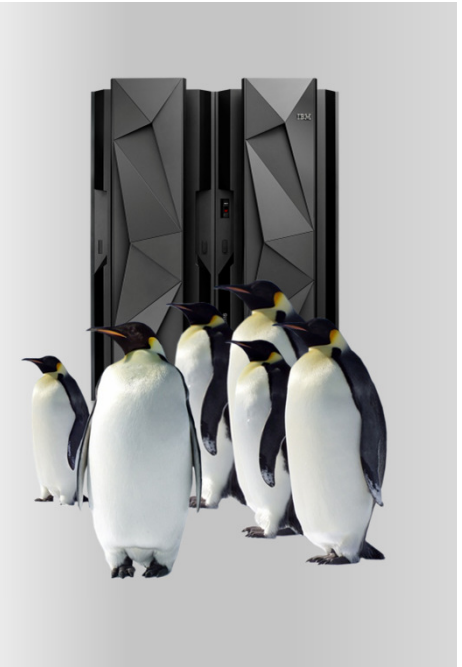
Enables automation of Linux virtual servers in a z/VM environment helping staff focus on business-critical tasks



IBM Spectrum Scale for Linux on z Systems *Standard Edition v4.1.1*



- Announcement includes the **Standard Edition v4.1.1 for Linux on z Systems** (in addition to the available Express Edition)
 - ☑ **Standard Edition includes the base functions**
 - ☒ **Information Lifecycle Management (ILM)** - *Increase resource utilization and operational efficiency through powerful policy-driven automated tiered storage management*
 - ☒ **Active File Management (AFM)** - *Empower geographically distributed workflows by sharing data across unreliable and high latency networks and across different location*
 - ☒ **Stretched Cluster support** - *Provides high availability against catastrophic hardware failures by replicating the file system's data to a geographically separated site*
- General Availability on June 12, 2015
- [Webpage](#) , [Solution brief](#)



IBM Spectrum Scale for Linux on z Systems

IBM Spectrum Scale is a proven, scalable, high-performance data and file management solution.

- *It removes data related bottlenecks by providing parallel access to data via cluster technology,*
- *provides simplified data management and integrated information lifecycle tools, and*
- *empowers geographically distributed organizations to place critical data close to everyone and everything that needs it.*

As a result it helps

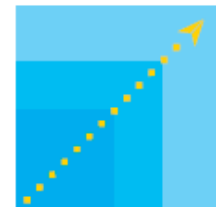
- *To improve availability and reliability*
- *To provide low-latency access to data from anywhere*
- *To maximize utilization and to improve scalability*
- *To manage growing quantities of unstructured data*
- *To enhance information lifecycle management*



Automation



Collaboration



Large scale deployments

IBM z/VSE

Preview of v6.1



- **In 2015, z/VSE celebrates its 50th anniversary. In continuation of these 50 years of innovation and evolution, IBM is previewing z/VSE V6.1**
 - z/VSE V6.1 will focus on online processing, security, and networking
 - To help clients protect their investments in online environments, z/VSE V6.1 delivers CICS Transaction Server (CICS TS) for z/VSE V2.1
 - TCP/IP for z/VSE V2.1 (new version) and IPv6/VSE V1.2 (new release)
 - Trigger functionality for the WebSphere MQ Client for VSE



- Planned availability date Q4 2015
- [Webpage](#)



Thank you