

IBM System z Technology Summit



Wrap-up CICS and zEnterprise



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Wrap-Up: CICS and zEnterprise

- **This session will review the concepts we have covered today and show how they apply to zEnterprise. The revolutionary new design of the zEnterprise “system of systems” addresses the complexity and inefficiency of today’s multi-architecture data centers by giving you the ability to integrate and unify IBM System z, Power and System x resources as one complete system. CICS is ready to take advantage of these advances, as well as integrating end-to-end solutions with other products and this session and demo you will see how.**

What you have heard today

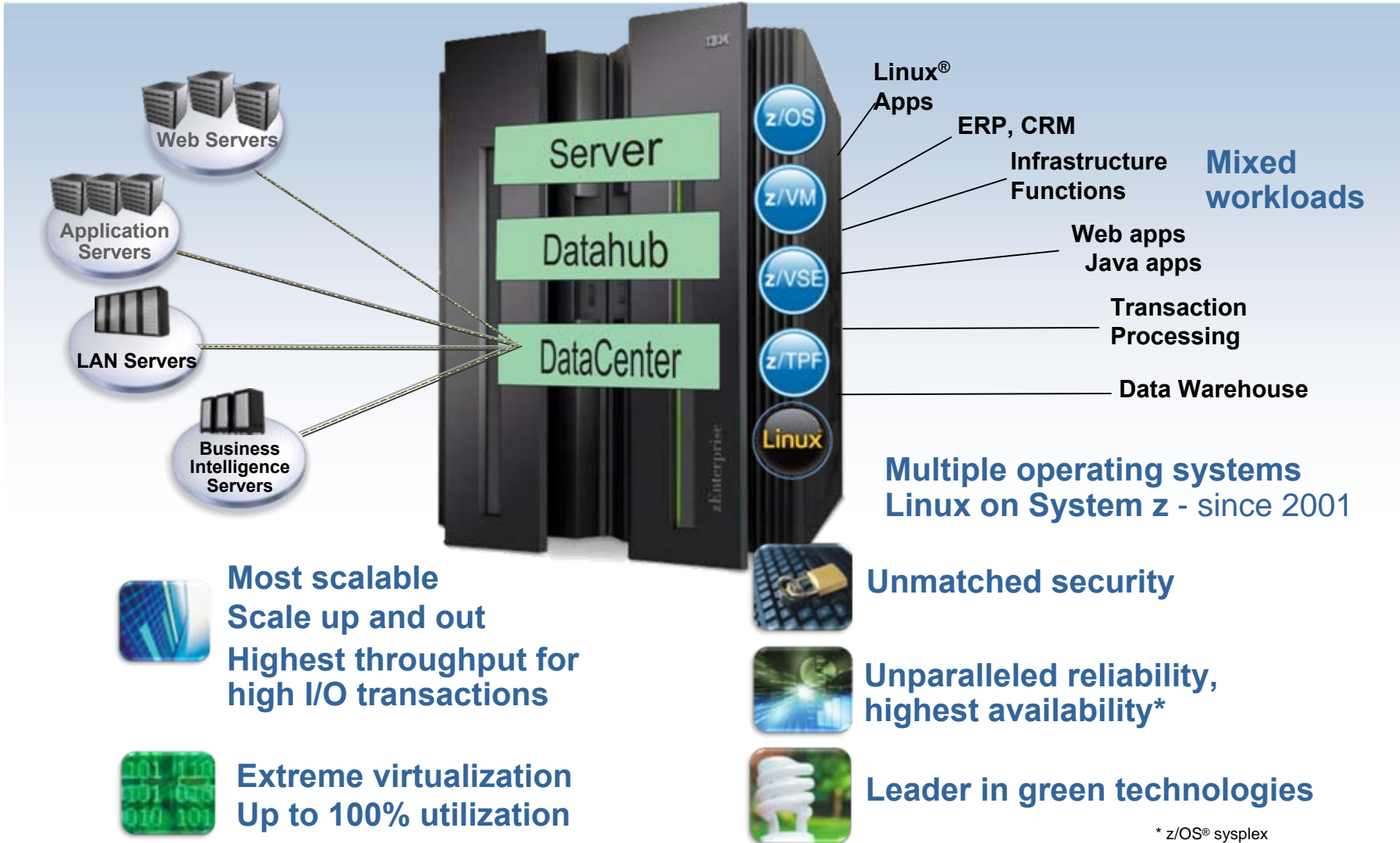
Revitalizing your Business

Revitalizing your CICS Applications

Simplifying Infrastructure

Tools

What is a System zEnterprise?



* z/OS® sysplex

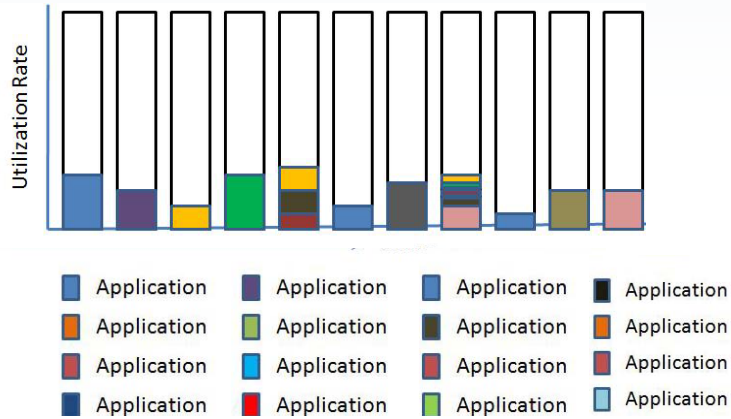
Maximizing Utilization of Resources on zEnterprise

- Up to 100% server utilization compared to 10-20% distributed server utilization¹
- Shared everything infrastructure allows for maximum utilization of resources
 - CPU, Memory, Network, Adapters, Cryptography, Devices

Lowers power consumption for each work unit

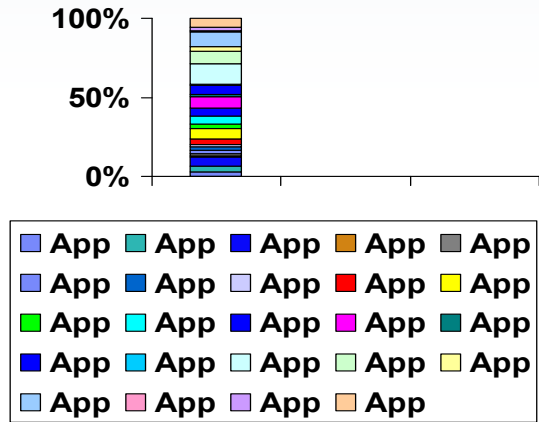
Customer savings

Underutilized distributed servers



Typically single application per server

Up to 100% utilized System z server

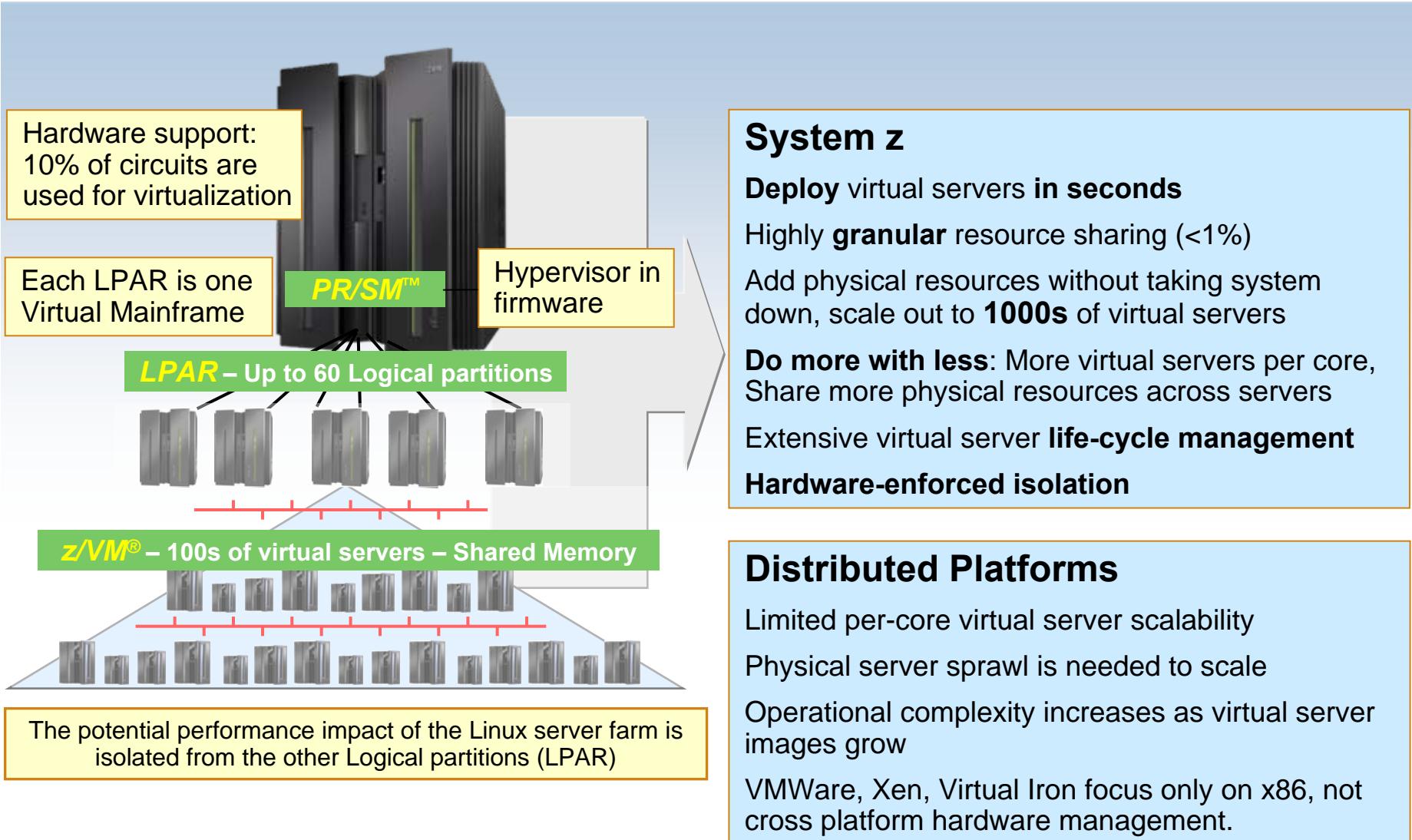


Multiple applications on one System z server

¹ Source: gomainframe.com Joe Clabby

System z's Extreme Virtualization

Built into the architecture not an "add on" feature



System z

Deploy virtual servers in seconds

Highly **granular** resource sharing (<1%)

Add physical resources without taking system down, scale out to **1000s** of virtual servers

Do more with less: More virtual servers per core, Share more physical resources across servers

Extensive virtual server **life-cycle management**

Hardware-enforced isolation

Distributed Platforms

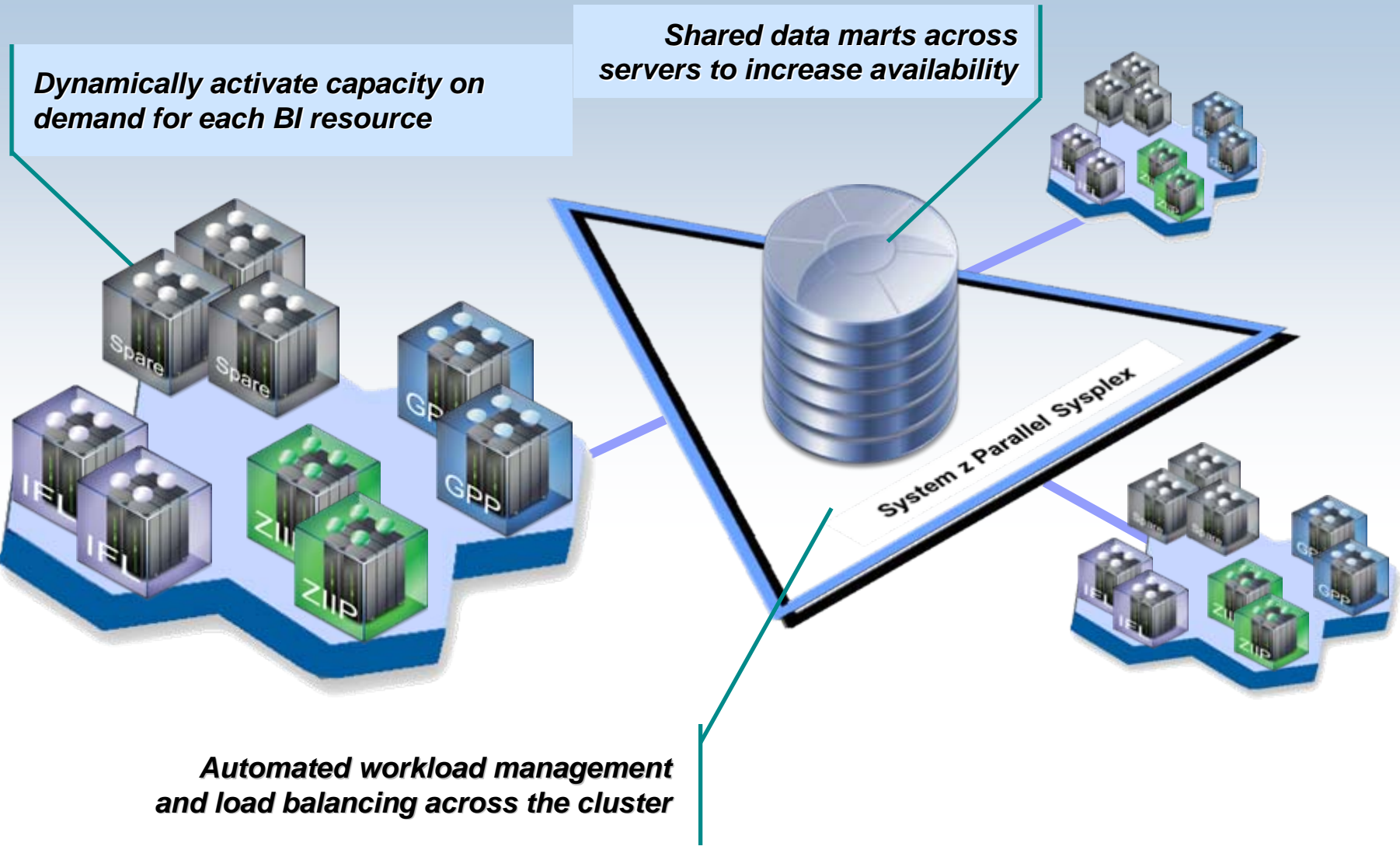
Limited per-core virtual server scalability

Physical server sprawl is needed to scale

Operational complexity increases as virtual server images grow

VMWare, Xen, Virtual Iron focus only on x86, not cross platform hardware management.

Scalable for all types of growth



IBM zEnterprise System – Best in Class Systems and Software Technologies

A system of systems that unifies IT for predictable service delivery



Unified management for a smarter system: zEnterprise Unified Resource Manager

- Part of the IBM System Director family, provides platform, hardware and workload management
- Unifies management of resources, extending IBM System z[®] qualities of service across the infrastructure

The world's fastest and most scalable system:
IBM zEnterprise™ 196 (z196)

- Ideal for large scale data and transaction serving and mission critical applications
- Most efficient platform for Large-scale Linux[®] consolidation
- Leveraging a large portfolio of z/OS[®] and Linux on System z applications
- Capable of massive scale up, over 50 Billion Instructions per Second (BIPS)

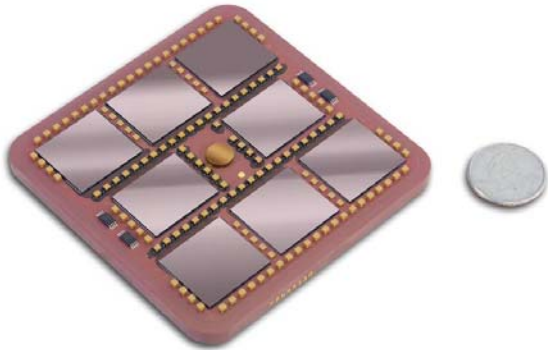


Scale out to a trillion instructions per second:
IBM zEnterprise BladeCenter[®] Extension (zBX)

- Selected IBM POWER7[™] blades and IBM System x[®] Blades¹ for tens of thousands of AIX[®] and Linux applications
- High performance optimizers and appliances to accelerate time to insight and reduce cost
- Dedicated high performance private network

IBM zEnterprise System and CICS

- 96 total cores running at 5.2 GHz
- New Instructions – particularly advantageous for Java workload
- Delivers up to 60% improvement in performance and total capacity compared z10 EC



CICS Benefits

- Existing applications get immediate throughput benefit
- CICS TS V4.2 Java applications can exploit new zEnterprise instructions

IBM zEnterprise BladeCenter Extension and CICS

- ✓ Expanded ISV support for enterprise applications
- ✓ Targeted for applications that interact with mainframe data and transactions
- ✓ Provisioned and managed by System z

CICS Benefits

- Consolidation point for TXSeries and CICS Transaction Gateway servers



CICS Transaction Gateway V8.0

Extending Access to CICS Transactions

Enable your CICS Investment for SOA through CICS TG

- **Scalable Adapter/Connector that enables modernization of CICS Applications for both J2EE and .NET environments**
- High performance, high scalability, and maximum system availability
- **Available on z/OS, AIX, Windows, Linux, Solaris & HPUX**
- **Industry proven in over 1,500 customer installations**

“We tested the new **CTG V8.0 High Availability exit** where you can now, dynamically, modify the list of CICS Servers a CTG can target, without the need to recycle the Gateway. We also tested the complement of **related commands** to list and reset the CICS Server array and to control the level of message logging performed by the gateway. We are **very impressed** with this new functionality. It has provided, precisely, what we were looking for, in terms of dynamic control of our CTG to CICS routing.”
David Jones, Aetna

“We tested the **new exits** which give an out of the box capability for high availability / failover and request validation and an easy template to customise these for further requirements. “We tested the CICS TG **explorer plugin** which offers a quickly implemented alternative to running a full monitoring solution for CTG / ZOS and CTG / AIX”
US Healthcare Provider

TXSeries for Multiplatforms V7.1

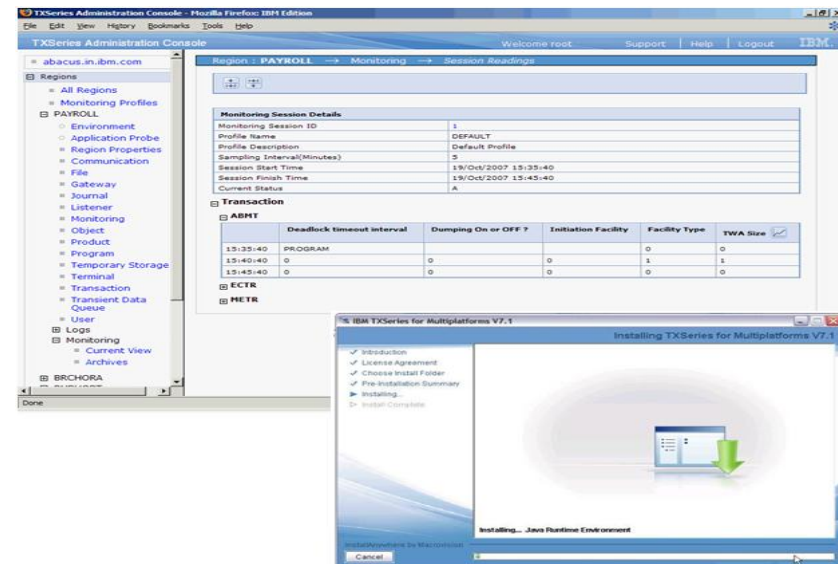
TXSeries runs and supports CICS Transactions on Distributed platforms

Key Characteristics:

- An application deployment platform for C, C++, Java, COBOL and PL/I applications
- Supports a wide subset of CICS API
- Integrated inside RDz as part of a local application development environment

New with TXSeries V7.1

- Simplified Interoperability with CICS and CTG over TCP/IP
- Support for Channels and Containers
- Enhanced TXSeries Admin Console
- Improved system resilience and debugging
 - Memory isolation
 - Task history logging
 - Performance Probe



TXSeries for Multiplatforms

Recent SupportPac Enhancements

IBM Migration Assistant for Oracle Tuxedo – CE01

Released: 6Jul10

- Enables Oracle Tuxedo applications to be seamlessly migrated to IBM TXSeries for Multiplatforms
- No Application changes required
- Minimal changes required to the application's build process.



TXSeries Business Events SupportPac – CB01

Released: 15Jun10

- Enables IBM TXSeries to be a source of events to WebSphere Business Events (WBE), and to participate in event processing solutions
- Small changes required to your TXSeries application code
- Similar to Event Processing supportpac for CICS TS V3



IBM WebSphere eXtended Transaction Runtime (WXTR)

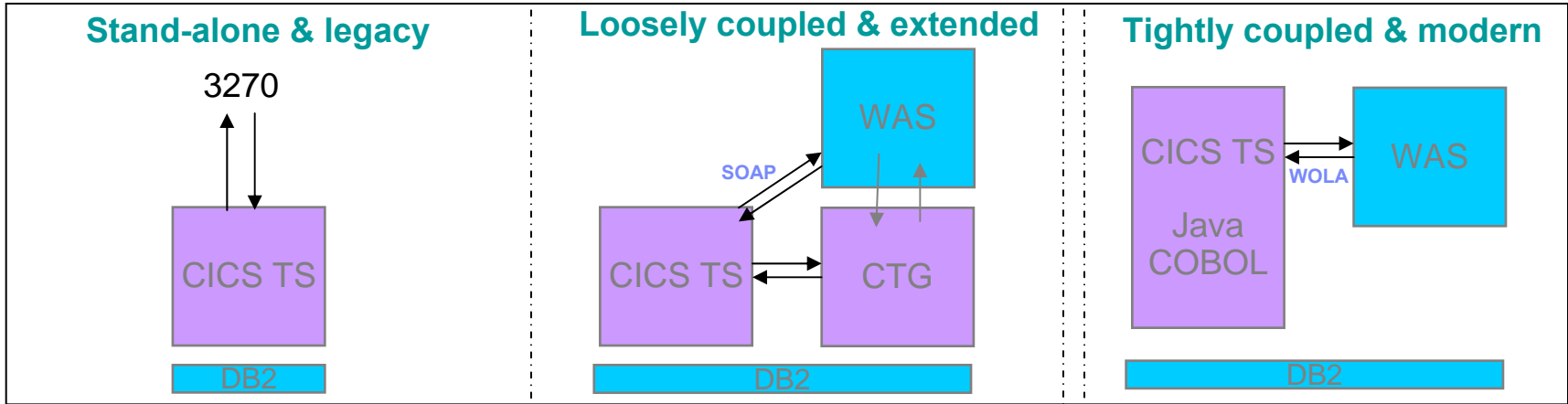
- **Create a highly responsive, tightly integrated application serving infrastructure for COBOL and Java workloads**
- **Capitalize on enterprise wide skill sets to effectively optimize and modernize COBOL assets while consolidating your infrastructure around WebSphere Application Server**
- **Increase operational efficiency by using the simplified, unified administration capability to centrally manage multi language workloads**
- **Simplify your integration complexity and improve agility of your SOA enabled application infrastructure to support growth**
- **Extend your existing transactional COBOL business applications into IBM WebSphere Application Server to leverage the portfolio's extensive business capability on distributed platforms**
- **Improve productivity and efficiency by using the enhancements that enable seamless problem determination and development across mixed language applications**

Transaction Processing on z196 and z/OS

Legacy applications, no Java requirement and modernization strategy

Traditional applications extended into JEE environments

Highest performing, mixed language application hosting

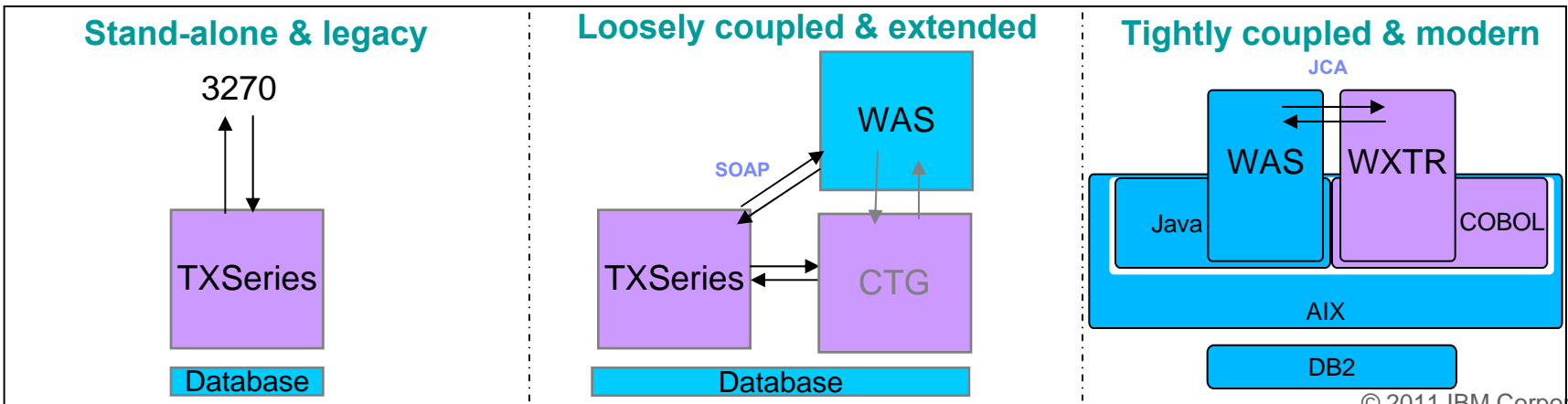


Transaction Processing on zBX and AIX

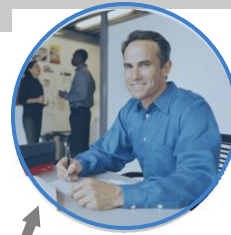
Legacy applications, no Java requirement and modernization strategy

Traditional applications extended into JEE environments

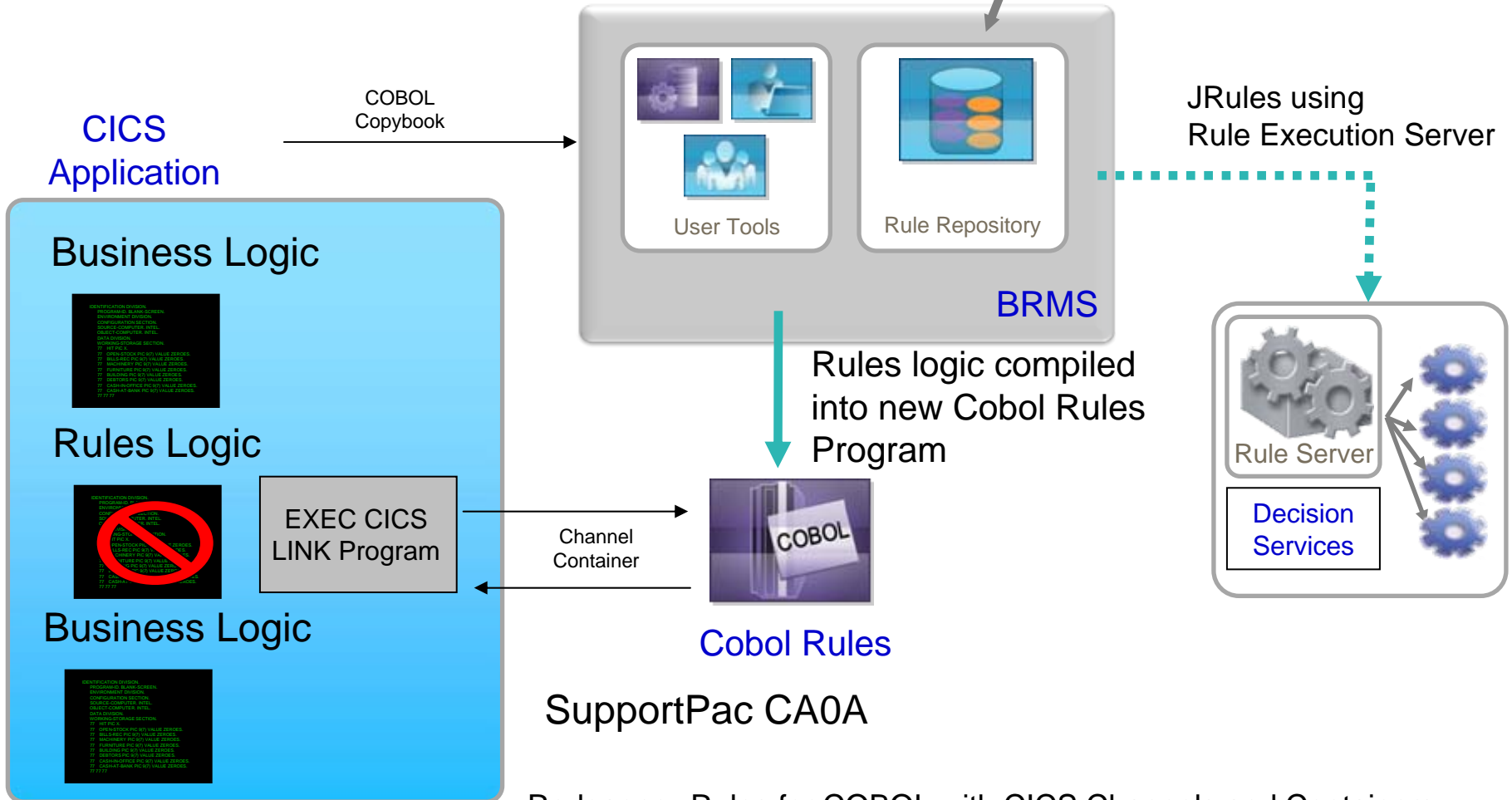
Highest performing, mixed language application hosting



ILOG BRMS System z Options



Write, maintain & manage rules



SupportPac CA0A

Redpaper - Rules for COBOL with CICS Channels and Containers
<http://www.redbooks.ibm.com/abstracts/redp4589.html?Open>

IBM Decision Manager

- **New combo product, includes:**
 - ILOG JRules and Rules for COBOL
 - WebSphere Business Events

WebSphere Business Monitor

End to end process visibility

Scorecards

Key Performance Indicators
for business units

Iterative Development Environment

Enhances development
process and facilitates testing

KPI History and Prediction

Predict future trends for
improved decision making
and faster reaction

Multiple Event Sources

End to end monitoring – IBM
BPM&C middleware, external
applications, legacy applications

Reports & Analyses

Understanding trends by
combining real-time performance ,
historical information and external
information



Event Publication

Use New REST API and
WS-N to publish Events

Dynamic Alerts

Notifications defined by business
user for agile decision making

Mobile Dashboards

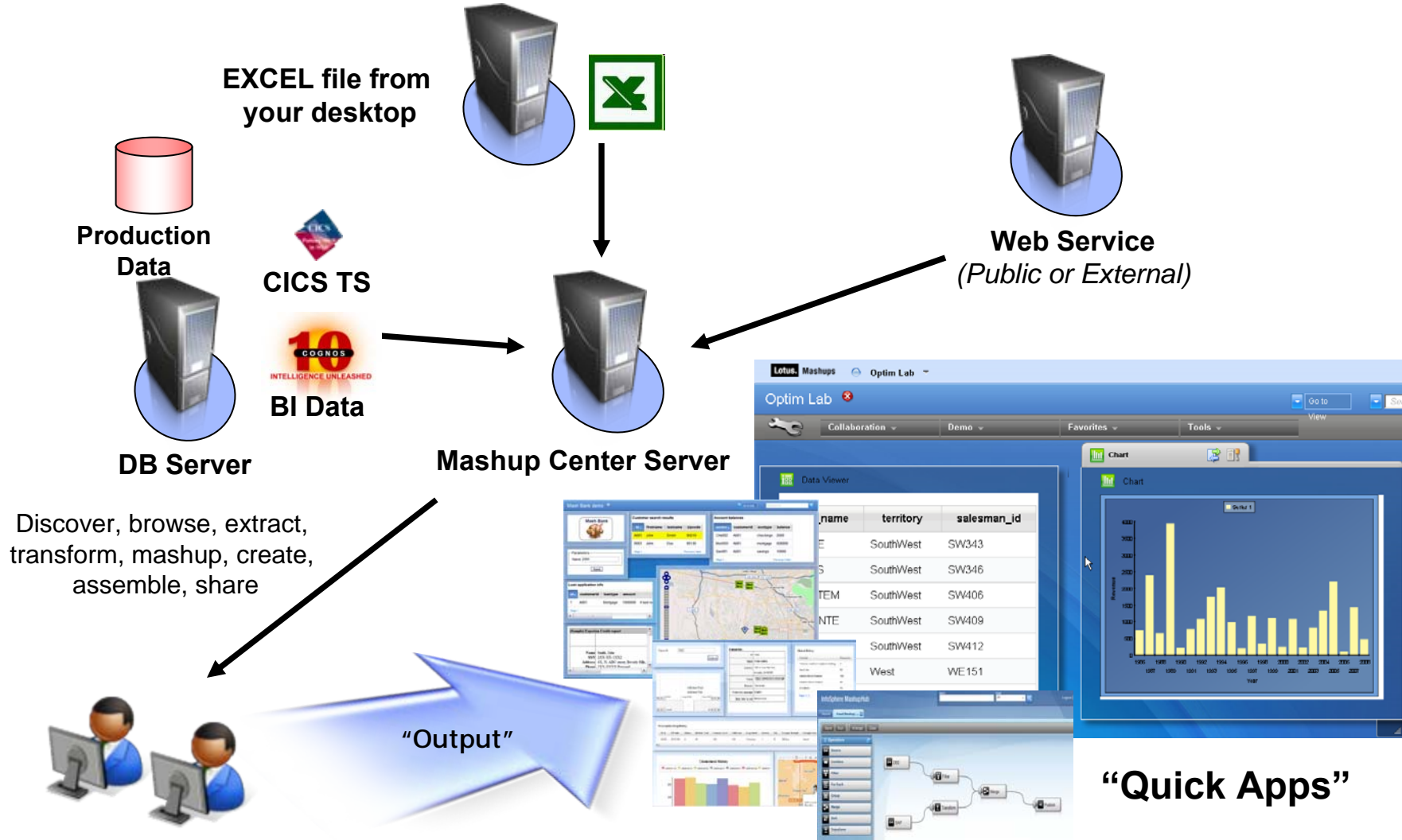
Access from smart phone,
Lotus and MS Excel

Modeled Alerts

Notification of situations
that require automated
responses

IBM Mashup Center

Provides Context to Your Data Helps to build “Quick Applications”

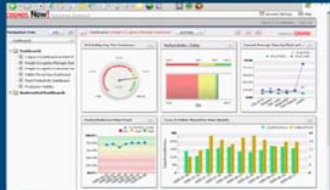




Cognos 10 now includes Cognos Real Time Monitoring

IBM Cognos Now! in the Context of Broader Operational BI FULL SPECTRUM OF OPERATIONAL BI

IBM COGNOS NOW!



Financial &
Business
Analyst

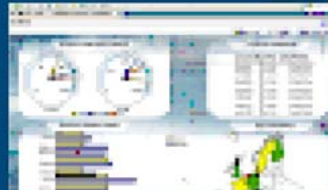


Customer
Service

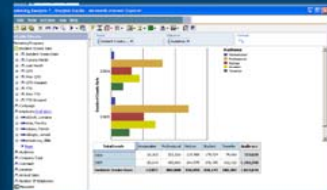


Line
Manager

IBM COGNOS 8 BI



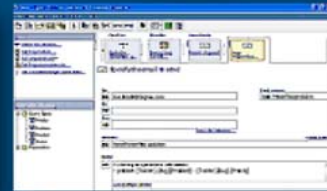
Reporting & Dashboarding



Analysis



Ad Hoc



Event Management

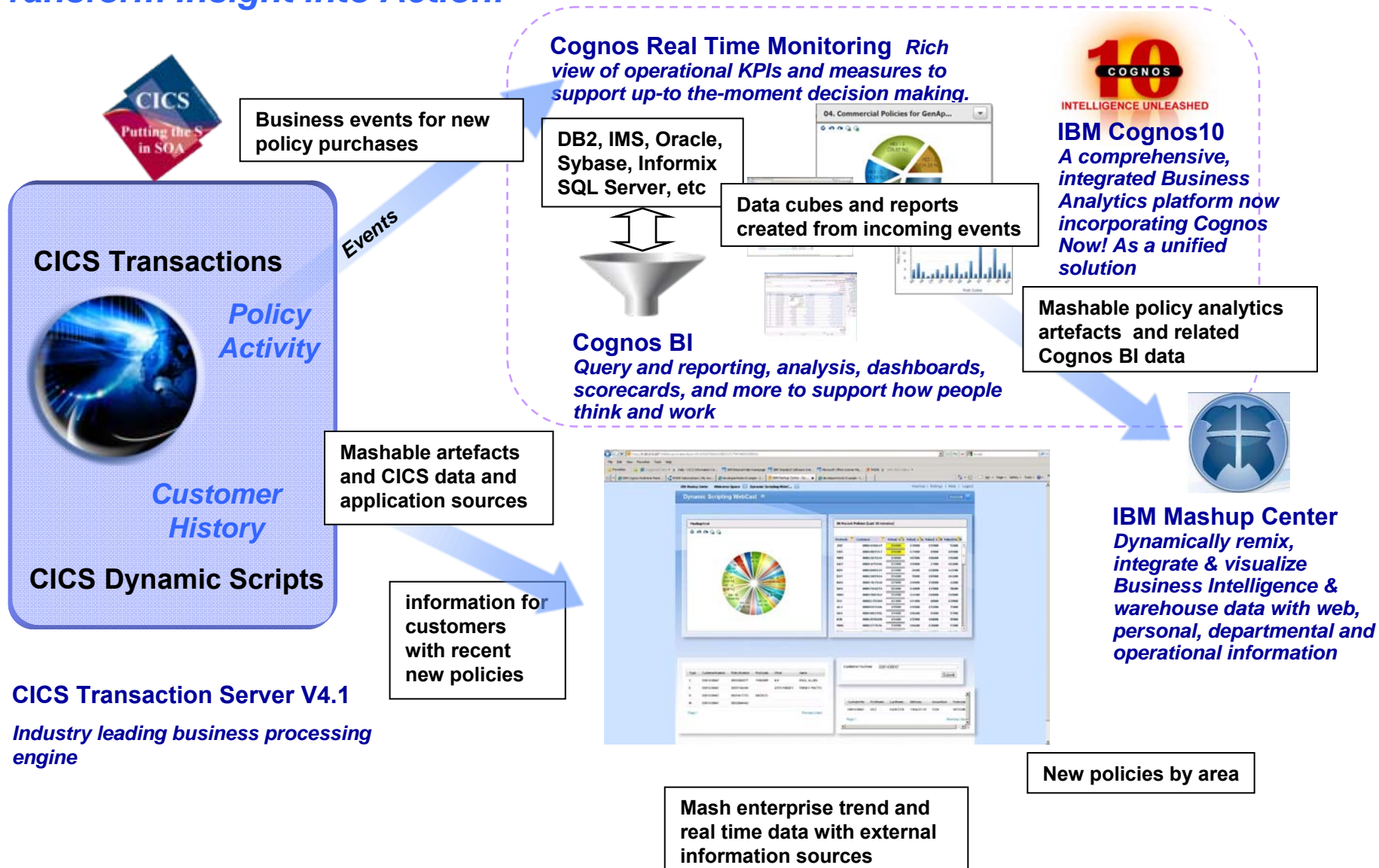
IBM COGNOS GO! MOBILE



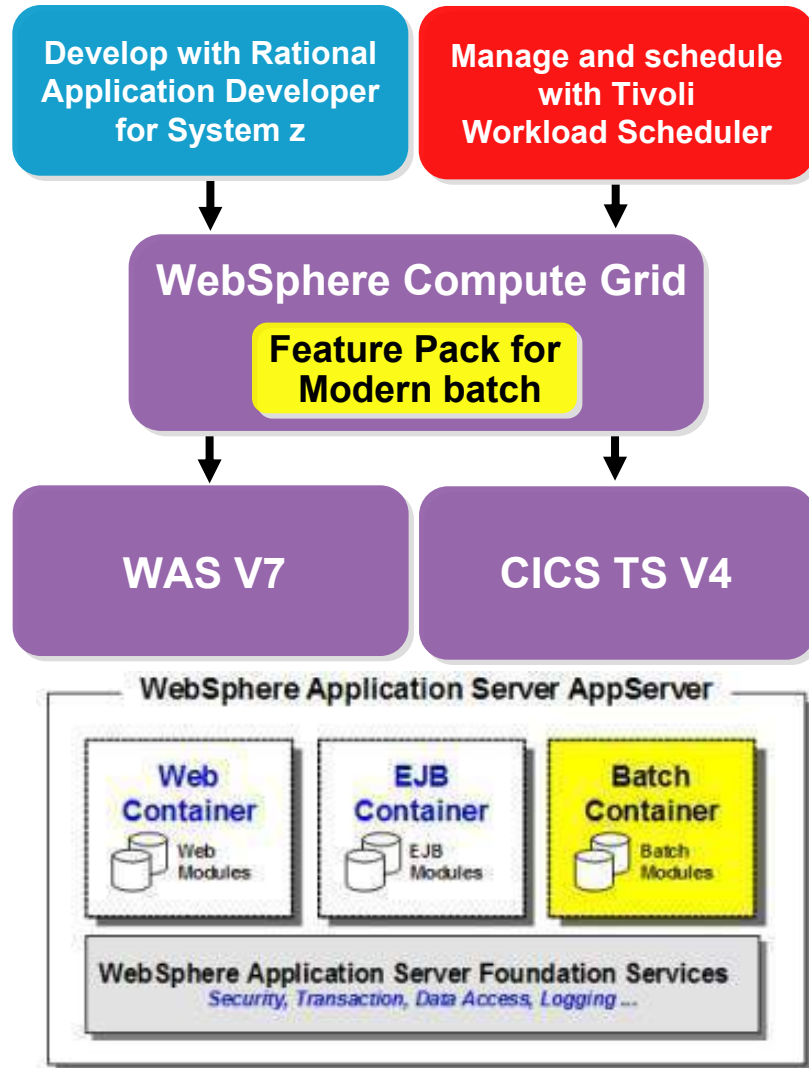
- Continuous monitoring of real-time flow of information – events, data, process flows
- Interactive reporting and analysis of both real-time and historical operational data
- Right-time proactive notification to the business to take immediate, corrective actions

Capture CICS events for smarter business outcomes

Transform Insight into Action!



Modernize batch applications for workload optimization



- **Enterprise scheduling of web services with new executors by leveraging Tivoli Workload Scheduler (TWS) 8.5.1.1 and TWSz 8.5.1 SPE**
- **Modernize CICS with new ability to schedule and manage Java job steps with CICS TS SupportPac CN11 for WebSphere Compute Grid**
- **Simplify file conversion for faster processing with WebSphere MQ File Transfer Edition**
- **Easy to use offering tools and operational controls for Batch workload execution supporting a Java Batch programming model with WebSphere Application Server V7 Feature Pack for Modern Batch**
- **Extends business flexibility, simplification, and growth of mission-critical applications and data with IMS 12 Beta**
- **Easy development of new batch applications using enhanced creation wizards and zJCL editing with Rational Developer for System z v8.0 with Java**

Summary

- **Revitalize your business and compete for new opportunities with CICS and zEnterprise**
 - CICS Atom feeds, to provide data from CICS into mashups and other rich internet applications
 - CICS Dynamic Scripting support, for rapid development of applications using programs and data in CICS
 - CICS Events, for non-invasive emission of business events from CICS applications, to gain insight using analytics, monitor business processing, react to interesting patterns of events, or drive additional processing
 - Separate business rules from business logic, and manage rules changes more effectively

Resources



For more information



CICS Development Technical Services

Engage the IBM Hursley CICS development team to ensure that you get the maximum value from your CICS investments.

Consultants are now available via a funded services engagement directly from CICS development providing a complete range of CICS services - no one has more experience!

- For more information please contact: CICSDTS@uk.ibm.com



CICS On Demand Seminars

Free customised technical agenda of CICS TS and CICS tools products

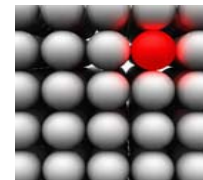
- Web Services, Events, Web 2.0, version upgrades, tooling etc.

Targeted at AD, System Programmers and Architects at customers' own location

Demonstrates how to use the new features in the latest releases to leverage existing solutions

Can be tailored to customers interests

- For more information please contact: cicssem@uk.ibm.com



CICS Communities and Information

- **CICS Transaction Server V4.2**
 - <http://ibm.com/cics/tserver/v42>
- **CICS Explorer**
 - Home page ibm.com/cics/explorer
- **Twitter**
 - Subscribe to the [IBM System z channel](#) & [CICSfluff](#) channel to get CICS news flashes
- **Facebook [I ♥ CICS group](#)**
 - News and views
- **YouTube channels**
 - [CICS Explorer](#) - Videos, demos and other cool stuff
 - [CICSFluff](#) - Other CICS videos
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Thank You !