

Business Results Powered by WebSphere on System z

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Change is Accelerating . . . Will You Keep Up?



83% Expect substantial or very substantial change

The change gap Triples

98% Plan business model changes

Agility is a Smarter Business Outcome

What Does an Agile Organization Look Like?

Characteristics Behaviors

Deep, continuous *alignment* between business and IT

Active LOB participation in IT strategy formation

Interdisciplinary skills

IT is part of business strategy, not an afterthought

Efficiently deliver and reuse business applications

Efficiencies are realized; applications fully meet user needs

A non-complex, robust and resilient connectivity infrastructure

Broader and faster collaboration and decision-making across ecosystem

Governance that makes it easy to make the right decision

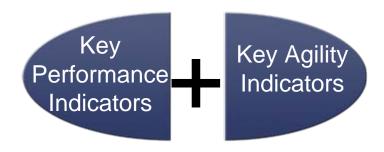
Reuse is incentivized; clear decision rights management; consistent, enforced policies

IT's strategic importance reflected in org chart

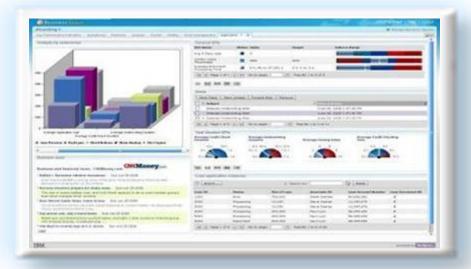
CIO is part of executive council



Key Agility Indicators Set the Bar for Success



Smarter Business Outcomes



300+ KAIs across multiple service lines:

- Supply Chain Management
- Financial Management
- Human Capital Management
- Information Technology



KAI library embedded in WebSphere Business Modeler & Monitor

Benchmark
against your peers
how adaptable
your are in rapidly
changing times

1 Tap Into SmartBusiness INsight To Achieve Agility ...And Chart Your SOA Course



- Introduction
 - What is SOA?
- Simplifying payments
 - The business challenge
 - How it works today
 - Integrating payment applications
 - The value SOA can bring

Integrating multiple channels

- The business challenge
- How it works today
- Information when and where needed
- Returning value with SOA
- Standardizing account opening
 - The business challenge
 - How it works today
 - Simplifying the process
 - The value to the bank
- Conclusion

Building or integrating a new account application using SOA services. New Account Application System Validation pervious Check for dealings accounts Account services · Find account Conste account Enduty account Delivine account

How SOA helps with actionable guidance for Today

Your industry

Current and future

business process insight

















Retail

Banking Government

Cross Industry

Insurance

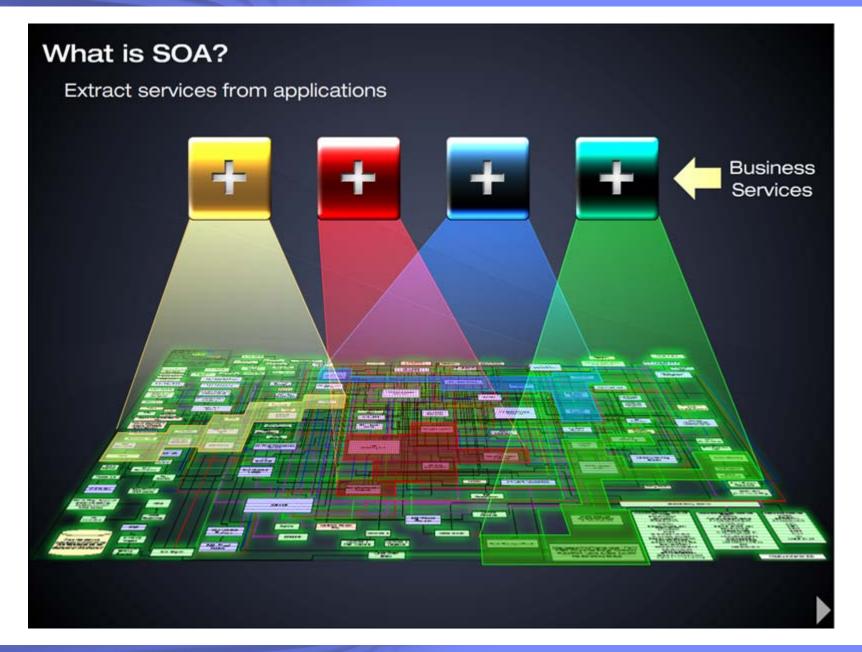
Healthcare

SCM

Electronics

Biopharma





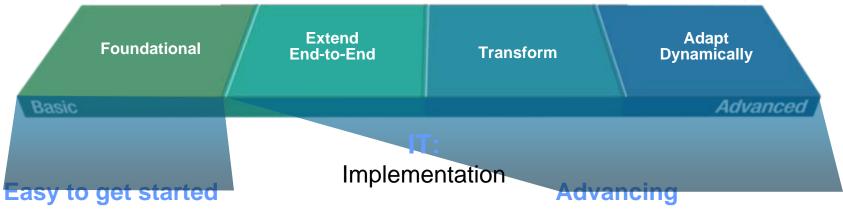


Smarter Technology Makes it Even Easier to *Get* Started quickly and *Advance* incrementally



Best practices & Guidance

A set of guiding principles to extend business value of deployment



- SOA Business Value Assessment
- SOA Entry Points
- SOA Sandbox

- Applying Best Practices
- Management & Security



Distinct Value for z Customers with Every Style Regardless of Where You Choose to Engage

Value to business Scope		Greater agility in specific, departmental business areas		Optimization and innovation across end-to-end business processes	Business model innovation to support the Globally Integrated Enterprise	a re	redictive business utomatically esponding to market orces
		Collaboration within a line of business		Coordination across lines of business	Enterprise-wide organizational cooperation	Enact significant shifts without direct IT involvement	
		Foundational		Extend End-to-End	Transform		Adapt Dynamically
Basic							Advanced
Value to <u>IT</u>	Focused, proven, high-ROI projects Start with what you have and what works		End-to-end process management to innovate Draw new value from existing assets		IT for strategic advantage and business model innovation Assets drive new business opportunities		Technology becomes invisible
% functions expressed as services	as <10%		<40%		<80%		>80%
% of services reused	reused			<20%	<50%		>50%

Based on 5700 customers using our SOA offerings

Deploying on System z provides differentiated value Enabling intelligent IT that works for your business

The New IBM System z10 Enterprise Class

The power of many . . .







. . . the simplicity of ONE

Server Leadership: 40+ years in the making!

Mainframe utilization rates often exceed 80%, and are designed to handle sustained peak workload utilization of 100% without service level degradation.

CICS is IBM's premier transaction processor in 90% of the Fortune 500 customers

- Processors, CPU speed, memory, network I/O
 - Growth of traditional workloads
 - Consolidation of hundreds of applications
 - Granularity of WebSphere deployments
 - Access to corporate data
 - Messaging speeds to support SOA
- Price / performance improvement of specialty engines
- Just in Time capacity and management
 - Adapt faster to workload variations such as dynamic SOA
 - Respond automatically to demand from CICS, IMS, DB2, WebSphere, ...
 - Deploy new WebSphere workloads in minutes

Getting Started Sub-capacity Pricing for z/OS IPLA Software Helping to Make It Easier To Deploy New Projects on z/OS Software

New!



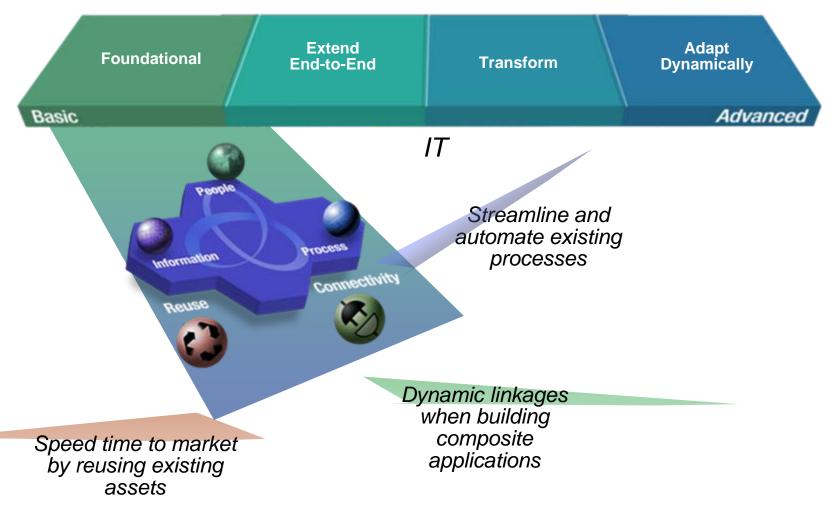
✓ Help customers start their projects

- ✓ Help improve alignment between software use and software charges
- ✓ Enable greater flexibility with software licensing
- ✓ Change LPAR capacity without changing software charges
- ✓ Improve price/performance



SOA Entry Points are a great way to build for agility For rapid business return

Business





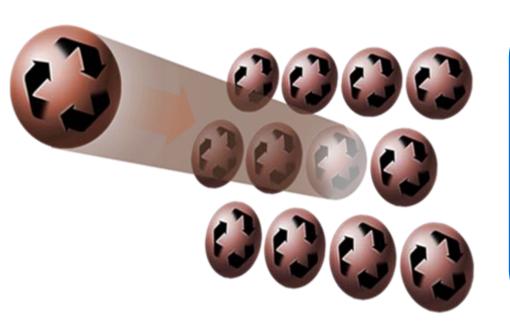
Speed Time to Market by Reusing Existing Assets Accelerate service development and deployment

Reusing Existing Assets will provide:

- High performance access to customer information
- Dynamic scalability for unpredictable workloads
- Helps customers achieve lowest TCO
- Designed to achieve the goal of zero downtime

<u>Benefits:</u>

- Extend ROI by reusing prior investments
- Reduce risk and cost
- Speed time to market



Supporting Portfolio

WebSphere Application Server V7



Open Source Consolidation Package



CICS Explorer



WebSphere Virtual Enterprise V6.1.0.3

■ WebSphere eXtreme Scale V6.1.0.3

WebSphere Compute Grid V6.1.0.3

CICS Transaction Server V3.2

■ DB2 V9.1

WebSphere Application Server for z/OS® Application Transparent z/OS Integration



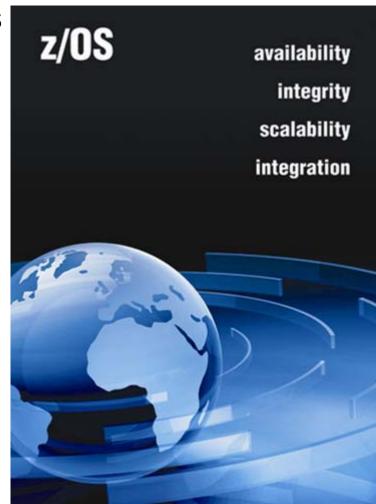
Combining Industry Leading SOA Runtime and z/OS to Deliver Superior Customer Value

Integration with z/OS

- Workload Management Leverages Workload Manager
- Security Use of the Security Authorization Facility
- Transaction Management uses Resource Recovery Services
- Thread Management OS level threads for monitoring & control
- Scalability Multiple Servant Regions
- Recovery Leverages Automatic Restart Manager
- Reporting System Management Facility

New with Version 7

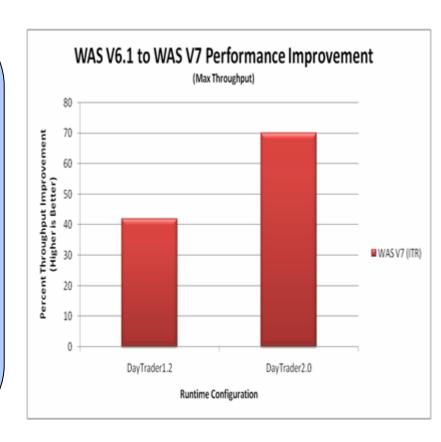
- Reduced response time with support for FRCA
- Reduced overhead for High Availability Manager in a Sysplex
- Improved thread failover, recovery, reliability and performance
- Reduced overhead associated with collecting SMF records
- Improved resource usage reporting, esp. for zAAP utilization



WebSphere Application Server for z/OS V7 Leading Edge Performance for Your Business



- WAS V7 improves upon WAS V6.1 up to:
 - 42% faster for legacy apps
 - 47% faster for Web Services
 - 70% faster for Java EE apps
- z10 EC + WAS V7 outpace z9 EC+ WAS V6.1 up to:
 - 103% faster for legacy apps
 - 128% faster for Java EE apps



^{*} Based on IBM benchmark metrics, 2008.

Virtualization & Consolidation for Greater Efficiency Open Source Consolidation Package



- Enables consolidation and intelligent management of
 - Applications running on alternative open source application servers
 - IBM System z servers running Linux
- Enhanced Qualities of Service
- Lower operational and energy costs
- Increase Flexibility and Agility
- Better Manage Health, Improve Service and Application Performance





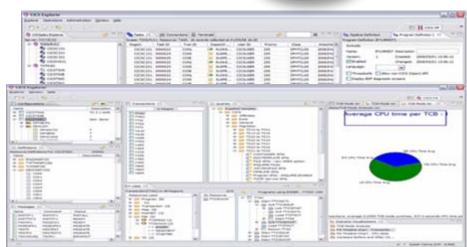


Simplification for faster time to market CICS Explorer - New Face of CICS





- Simplified access to CICS
 - Extending the success of eclipse based Explorers to CICS
 - Revolutionary integration of development, administrative, and operations tools
- Rapidly enable staff
- Shorter development cycles
- Faster time to market
- Improve productivity
- Protect service-levels
- Reduced TCO for CICS apps



"1000 times better than the previous UI."

- Customer

"If you are not using it, or you're not trying it, well, you should!"

Cary Barnett, The Bathwick Group

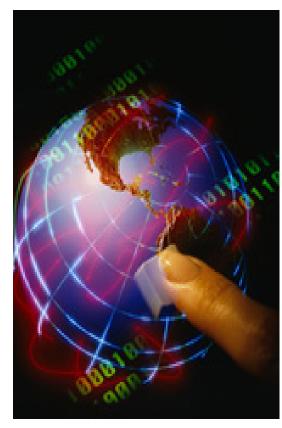
- Gary Barnett, The Bathwick Group



Benefits of Running Applications on System z

Combine the availability, scalability and security of System z with the industry leading Application Server for:

- ✓ Integration with existing mainframe assets
- ✓ High performance access to customer information.
- Server consolidation and simplification of spiraling server assets
- √ True dynamic scalability for unpredictable workloads
- ✓ Zero downtime for services that drive the business
- ✓ Exploitation of Java/J2EE programming skills
- ✓ Uninterrupted support of unpredictable workloads
- ✓ Lowest TCO for the lifetime of the application environment



Hardware, operating system, and middleware working together to bring true 99.999% application availability to your business critical services.

Industry: Consumer Products
URL: http://www.datev.de/

"With more than
1,000 developers, our
organization strives for
flexibility in creating new
applications and managing
the whole application
portfolio. CICS Transaction
Server gives us that
advantage by enabling us to
create Web services with
ease."

-Guenter Schneider, Online Systems Architect, DATEV eG



DATEV



DATEV eG

Easy linkage between time-proven core business processes and new business models

Challenge

Manage change in tax and regulatory environments by taking advantage of new technology that provides flexibility to application developers

Why IBM?

DATEV has a longstanding relationship with IBM and has experienced consistently strong and reliable performance with its IBM CICS® Transaction Server

Solution

Service oriented architecture enabling application developers to reuse existing code, speeding up time to market

Key Benefits

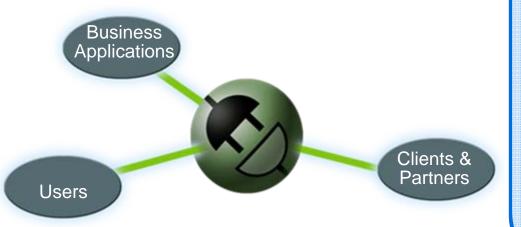
Better cost efficiency due to lower requirements on CPUs; faster application development time



Connectivity for Greater Agility Connect systems, users, and business channels

Connectivity links applications, services and users to:

- Deliver a robust, resilient connectivity infrastructure that fully leverages your System z investment
- Provide integration between departments and partners without complexity
- Bring together new and existing IT assets



Benefits:

- Easy, reliable access across systems
- Lower maintenance cost
- Dynamic linkages when building composite applications

Supporting Portfolio

WebSphere MQ File Transfer Edition V7.0

New!

CICS Web 2.0 ATOM Feed - Support Pack

Enhanced!

■ WebSphere Enterprise Service Bus V6.2

WebSphere Service Registry & Repository for z/OS V6.2

WebSphere MQ for z/OS V7

New!

WebSphere DataPower® SOA Appliances

■ WebSphere Message Broker for z/OS V6.1

CICS Transaction Gateway for z/OS V7.1

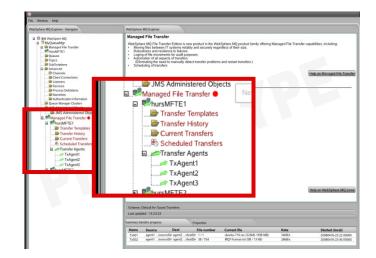
WebSphere Transformation Extender for z/OS V8.2

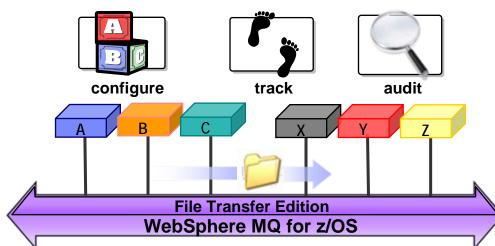


Delivering Managed File & Application Integration WebSphere MQ File Transfer Edition for z/OS



- File transfer services on top of industry leading WebSphere MQ
- Enable managed movement of files, regardless of size
 - Reliable
 - Auditable
 - Secure
- Reducing operational costs through synergies
- Lowering skills requirements
- Helping to make file transfers an integral part of your overall SOA connectivity strategy







Greater Empowerment with Web 2.0 & Mashups



People can solve business problems more effectively by remixing enterprise and web information



CICS Web 2.0 ATOM Feed Business benefit in a state-of-the-art solution



Enterprise Content



- Enable CICS applications to
 - Provide Live information for Web 2.0 consumption
 - Integrate with related data
 - Give full picture in a single holistic view via WebSphere sMash.
- Create decision-support tools for knowledge workers
- Build composite user interfaces for expert workers
- Make new kinds of applications based on up-to-date content and information
- Deliver information feeds & widgets to consumers to use in their own mashups

Home / Underwriter S... -

Settings | Help | Logout

Underwriter Scenario

Go to View Search All Q

≿⊜ Tools

Tools Content Feeds ~

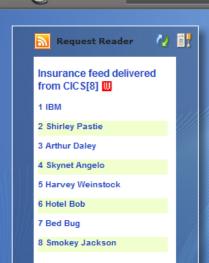
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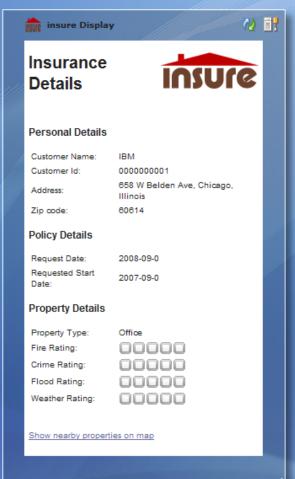
Tools ~

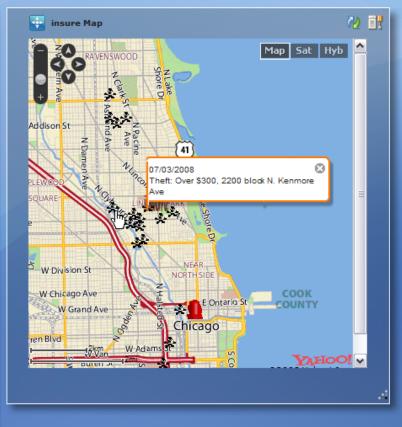
Favorites ~

Collaboration 🔻

CICS Insurance Demo







Integration Across Your Business Building and Governing Your ESB





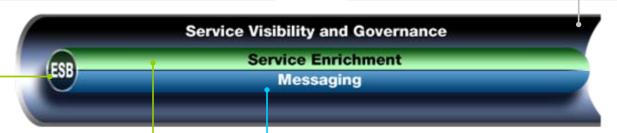
Enhanced!

WebSphere DataPower SOA Appliances

- Expanded WMQ, WSRR, WTX, and 3rd party interoperability
- Enhanced SOA Security management features
- DB2 and ODBC Enhancements

WebSphere Service Registry & Repository for z/OS V6.2

- •SOA Governance Validation and profile updates
- Consumability and performance enhancements
- Optimize use of services



Enhanced!

WebSphere ESB for z/OS V 6.2

- Delivers Policy-driven connectivity
- Enhances web services standards support
- Enhances service mediation capabilities

WebSphere MQ for z/OS V7

- Publish and subscribe support integrated into the z/OS queue manager
- Improved ease of use for publish and subscribe and Java Message Service messaging
- Web 2.0 support

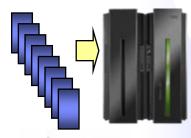
New and Enhanced!

When to use System z as the Hub for your ESB

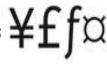


For a successful SOA implementation, you need an ESB that:

- Provides connectivity to all your existing environments
- Helps ensure quality of service to support your service-level commitments
- Handles complex transactions across multiple resource types and rolls back distributed transactions when problems occur
- Supports effective end-to-end monitoring and measurements
- Meets security and regulatory requirements









System z is the platform of choice for..

Virtualization

- High resource utilization
- Massive consolidation and simplification
- Enterprise-wide workload management
- Leverage existing infrastructure and skills

Handling business critical workloads

- Up to 99.999% availability
- Automated recovery from failures
- Dynamic workload balancing

Performance

 ESB performance improvements when co-locating with z/OS data.

Efficient growth

Pay for what you use

Industry: Education

URL: http://cms.bsu.edu/

"SOA has been such a gift to us. It enables us to embrace a new technology that provides services at a level that we couldn't even imagine before."

-Dr. O'Neal Smitherman







Ball State University

Ball State University bridges disparate systems and solves key administrative issue with IBM SOA solution.

CHALLENGE

 Coordinate 40 name and address systems to streamline administrative processes and ensure information integrity for users

SOLUTION

 SOA with Enterprise Service Bus to connect siloed applications without hand-coding individual API calls

BENEFITS

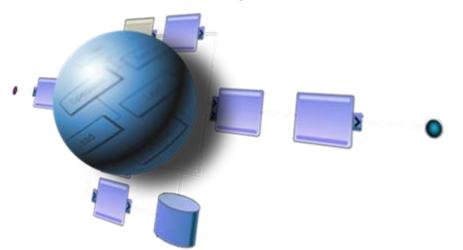
- Ability to develop and implement services in an SOA environment for resolving name and address discrepancies in 10 months, as opposed to several years for hand-coding individual application connections
- Confidence that IBM solution can lead to wider use of SOA to further streamline administrative business processes
- Services created here can be reused in later SOA efforts



Automate and Integrate *Processes* Treat tasks as modular services

Achieve business process innovation through:

- Streamlining and simplifying business activities
- Controlling processes where they run
- Improving the flow of existing processes
- Eliminating the need for manual steps
- Integration with workload manager / intelligence resource director
- Security built into system layers
- Connections delivering automated processes



Benefit:

- Streamline processes
- Manage and automate workflow
- Reduce error rate

Supporting Portfolio

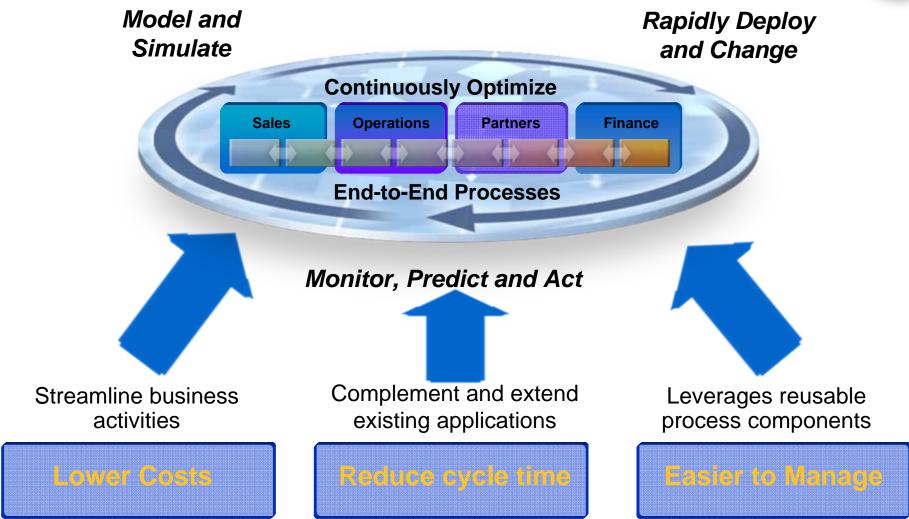
CICS TS Event Processing – Support Pack

WebSphere Process Server for z/OS V6.2 WebSphere Integration Developer V6.2 WebSphere Business Modeler V6.2 WebSphere Business Monitor V6.2 WebSphere Business Events V6.2 <a> WebSphere Business Service Fabric for z/OS V6.2



Process Automation Improves Operating Efficiency and Reduce Costs





Tame The Flood of Business Events for Knowledge and Insight



What is a Business Event?

An action that has occurred, or the absence of it occurring, which has relevance to the business

Large companies can experience up to **800 Billion** business events daily

Nearly 4 Trillion RFID events are emitted each day





Over **190 Billion** emails are sent daily



- WebSphere Business Events & eXtreme Scale
 - •Exploits WebSphere eXtreme Scale capability for high event volume customers
 - •Trial code and marketing kits for Business Partners
- •CICS Transaction Server Support Pac
 - •Brings Business Event Processing to the mainframe

Turn a flood of seemingly unrelated events into actionable business context

Source: zdNet; idtechex, didyouknow.com

Capture actionable insights from real-time business events with <u>Business Event Processing</u>



Actionable Business Context

Complex Event Processing

Causality Aggregation
Complex Queries



Event emitters and sources

Event pattern detection Correlation analysis



Real-time business event visibility

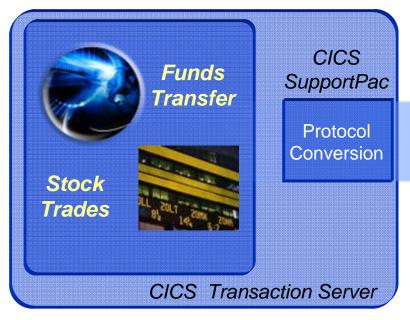
Patterns and correlations elevated to business users

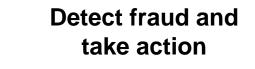


Capture mainframe event sources for greater insights and action

















WebSphere Business Monitor



WebSphere Process Server



WebSphere Business Events integration with WebSphere Business Monitor, Tivoli NetCool and CICS Transaction Server

The IBM BPM Suite Tames Chaos with Process



- Unified, integrated packaging to rapidly accelerate BPM initiatives
- Greater consumability for end users
- Attractive pricing bring BPM into easier reach

Business Process Management Methodologies BPM Expertise Pre-built Assets

IBM BPM Suite

- Dynamic Process Edition
 - Integrated packaging for end to end dynamic BPM
- Active Content Edition
 - Integrates Enterprise Content Management BPM for processdriven, active content

BPM Healthcheck Services

Identifies current strengths and shortcomings in different dimensions and articulates a BPM Strategic Roadmap

* New!



WebSphere Process Server for z/OS® Application Robust platform that is easy to deploy



Leveraging a strong SOA foundation on z/OS for process flexibility, responsiveness and access to information assets

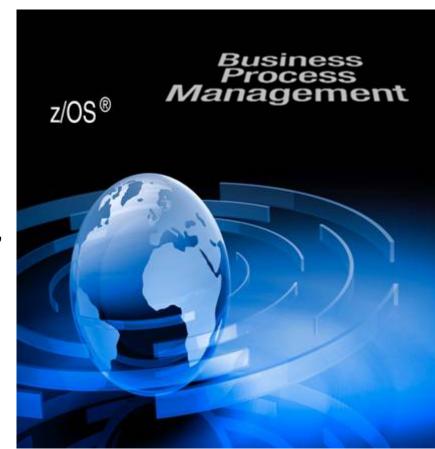
New with Version 6.2

- A compelling new Web 2.0 business user interface to manage human tasks, timetables & orchestrated processes
- Lotus Forms integration for human tasks
- Greater flexibility and control for business rules, ad-hoc tasks & process execution

Integration with CICS

33

- CICS applications can be part of business processes
- CICS events feeding WebSphere Business Events to identify patterns of interest



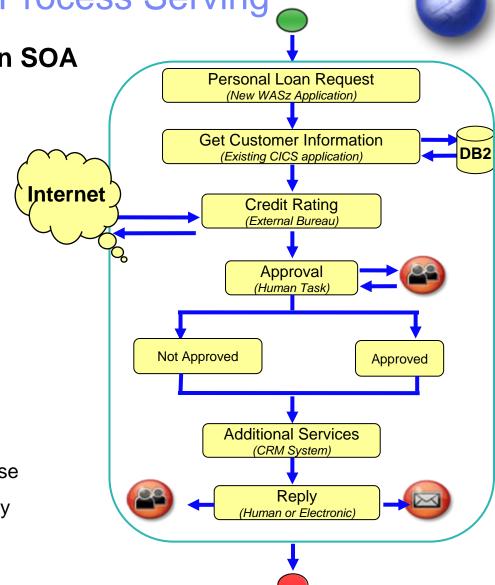
When to Use System z for Process Serving

System z—The choreographer for an SOA

✓ Efficiency: Control processes next to the transactions they invoke

✓ Integration: Improve and extend the flow of an existing process

- ✓ Automation: Reduce the human enter keys
- Reliability: Guaranteed connections and coordinated transactions deliver automated processes with integrity
- ✓ Workload Management: Intelligent use of system resources for mixed workloads supporting composite applications
- ✓ Security: Built into all system layers
- ✓ Availability: (zero downtime)/OS brand promise
- ✓ Performance: Full utilization of system capacity
 with same class of service



Enhanced!

The New Customer Wants To Experience at the Click of a Button! Introducing Smart SOATM Sandbox through Cloud Services

Delivers...

- Hosted software trial
- Tutorials
- Best practices and implementation guidance



Coming Soon!

- Extended Experience up to 30 day Trials
- Business patterns: Industryfocused end-to-end use cases
- Exercises for all entry points, Governance, and Green
- Enterprise Modernization
- Available to Business Partners at 40 Innovation Centers World-wide

For easier...

- Access to embedded best practices
- Hands-on SOA experience and education
- Ways to get started

Build skills and evaluate options with zero cost or commitment



Experience proven SOA Infrastructure Services to get you started and ensure success



SOA Infrastructure Strategy and Planning Workshop Services SOA Infrastructure Healthcheck Workshops



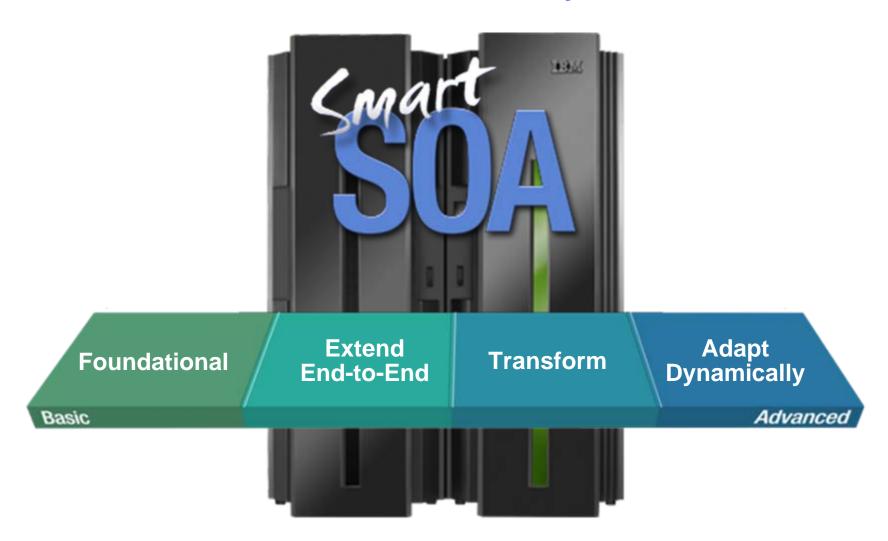


ibm.com/soa/impact2009





The Future of Smart SOA™ is on System z



Solid Foundation for the Business Driven Decision Making



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