CICS Family: Executive Overview, Trends and Directions

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Director CICS Development

Date of Presentation: 8 Aug 2011
Session Number 9598

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Abstract

- During the second part of this session, Dave Andrews, the CICS Director from IBM Hursley Laboratory, will deliver the CICS product update and keynote.
- Dave will cover the latest and greatest announcements in the CICS product portfolio including the newest CICS TS V4.2 release.
- Additionally Dave will also provide an insight into the roadmap for CICS TS and the rest of the portfolio demonstrating how CICS is continuing to evolve in response to changes in the marketplace and technology landscape - including the latest zEnterprise hardware exploitation and an outlook on Cloud Computing.

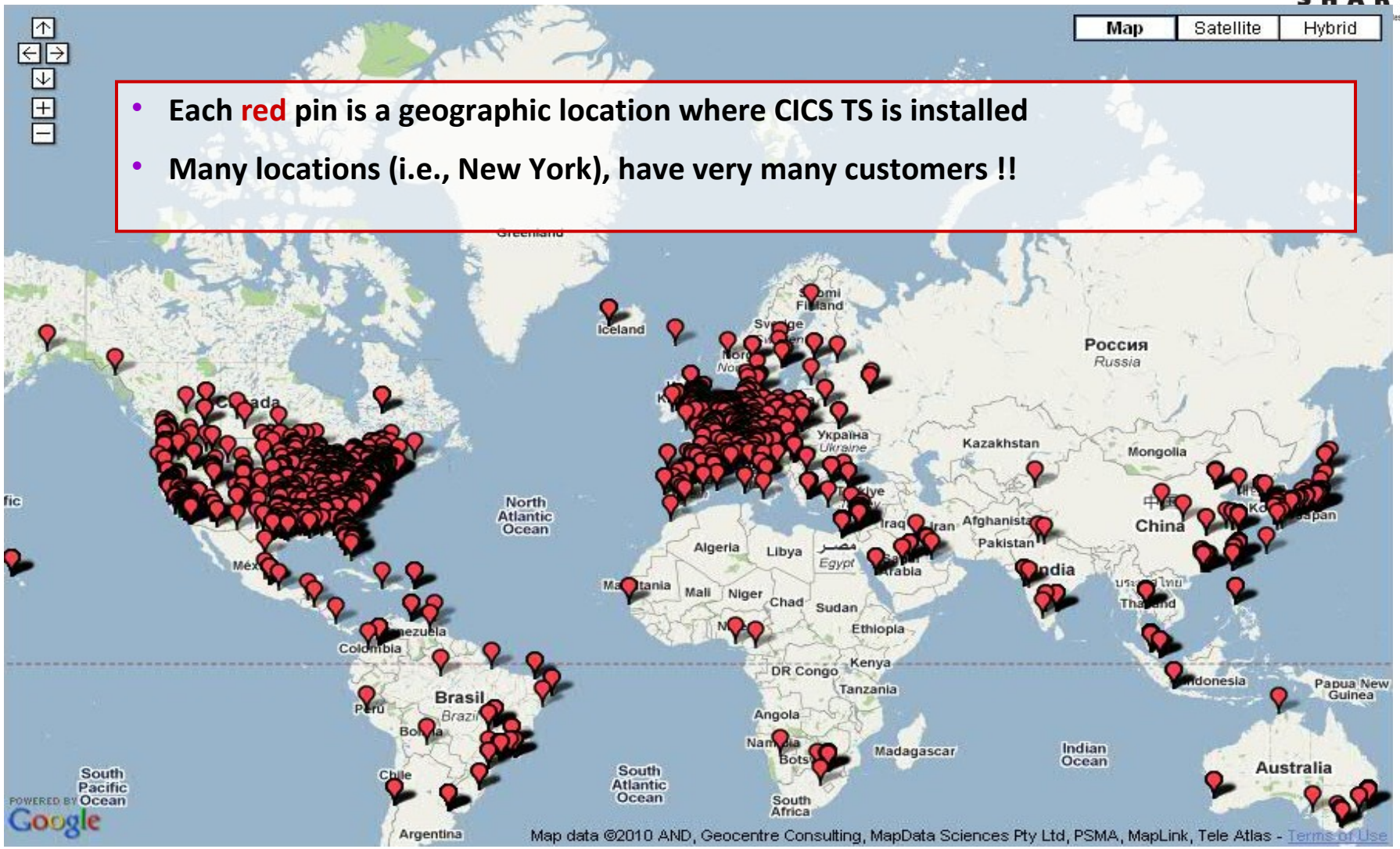
Topics

- CICS Business Update
- CICS Product Directions and Announcements
- Summary and Q&A

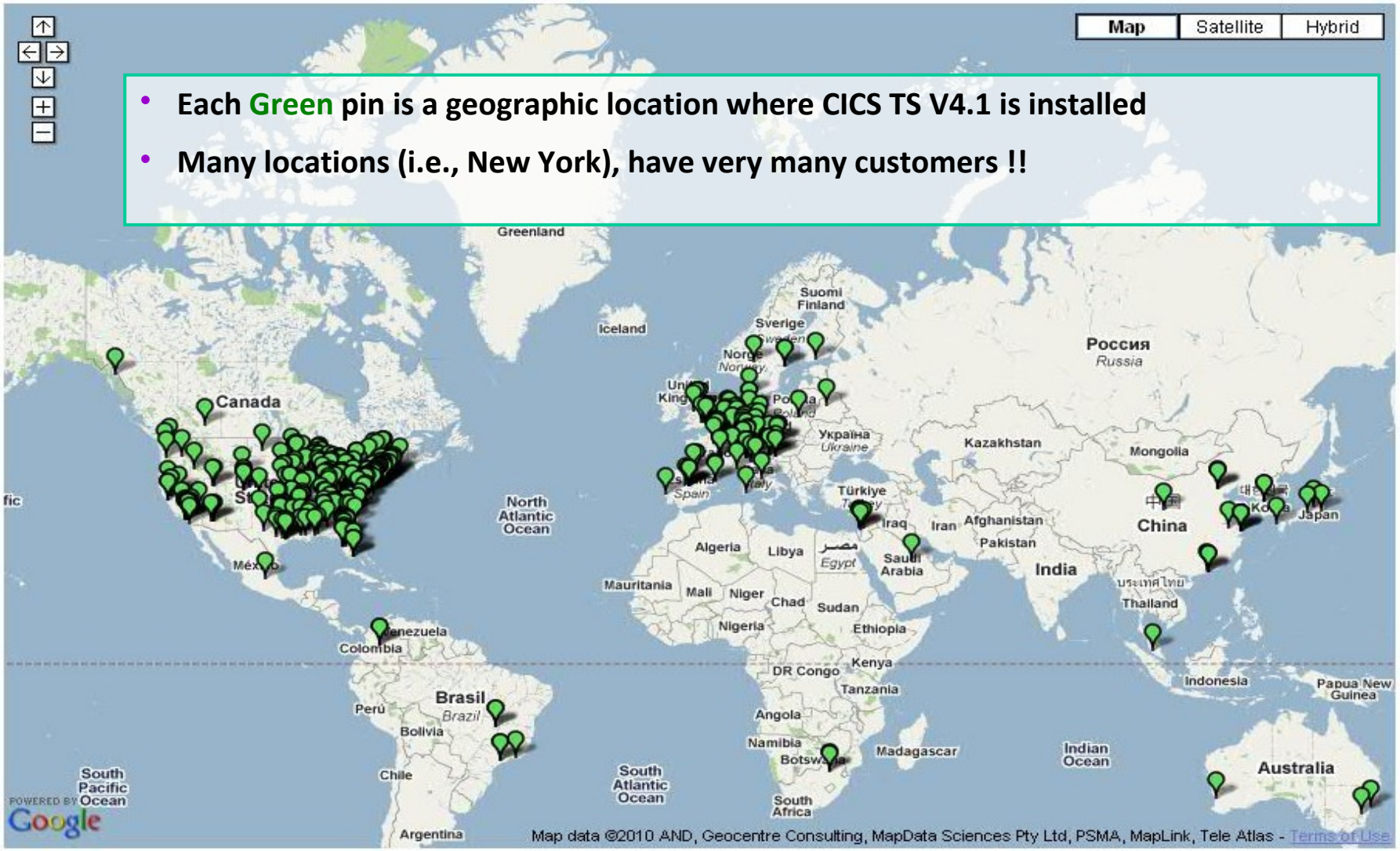
CICS State of the Business

- Overall CICS business not greatly impacted by Worldwide slowdown
  - Transaction rates continue to grow approx 8% per year
  - Some smaller (under 50 MSUs) customers migrating to non System-z based packaged applications
  - New CICS customers in China, Korea, India and Brazil
- Market Trends
  - Continued focus on mainframe modernization and reusing existing Business Logic
  - Mergers and Acquisitions are creating many very large scale CICS installations (>1000 CICS regions)
  - Noticeable growth in CICS Java programs, but Cobol, PL/I and C are still the dominant languages
  - Adoption of CICS Tools continues to grow and become more widespread, particularly CICS Explorer, VR, IA, SM, PA and IBM PD Tools
  - Strong growth in RDz and the Unit Test Tool for affordable and modern CICS Application Development
  - Customer appetite for Cloud based IT solutions
- IBM Investment in CICS new capabilities remains strong

CICS Transaction Server for z/OS Installations



CICS Transaction Server for z/OS V4.1 Installations



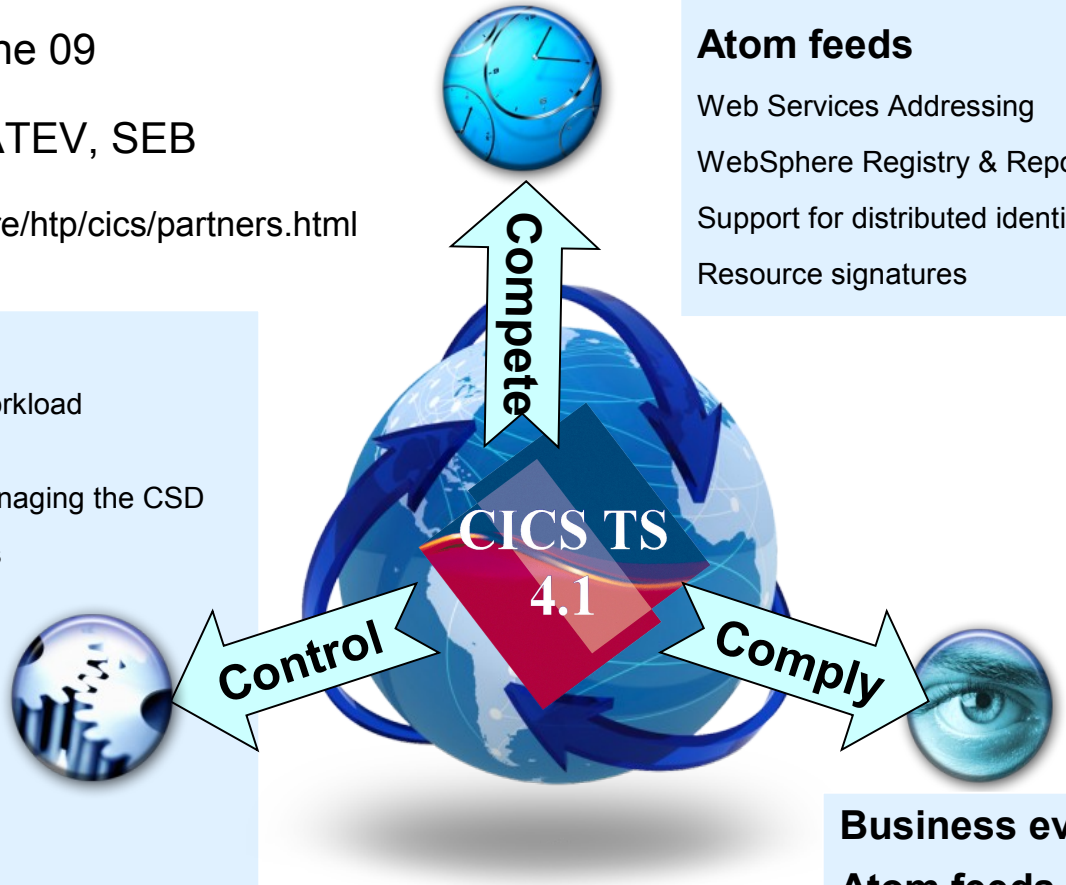
CICS Product Portfolio Strategy

1. Continue to be the world's best enterprise level transaction processing platform
   - Support traditional CICS values of quality, scalability, performance and reliability
   - Continue to Support Enterprise Modernization through
     - Mixed programming languages
     - Modern programming architectures
2. Simplify management and reduce complexity
3. Encourage a vibrant partner ecosystem and community
4. Extend reach to emerging geographies and new customers
5. Deliver frequent innovations to maintain market leadership

CICS Transaction Server V4.1

Announced: April 09
Generally Available: June 09
Customer References:
- John Lewis, BCX, DATEV, SEB

ISV support:
- http://www.ibm.com/software/htp/cics/partners.html



Business events

Atom feeds

Web Services Addressing

WebSphere Registry & Repository Support

Support for distributed identities

Resource signatures

CICS Explorer

Enhanced CICSPlex SM workload management

New SPI commands for managing the CSD

Performance Improvements

MQ Group Attach

Discovery Library Adapter

IPV6

Large file hosting

IPIC Transaction Routing

Application Bundles

Improvements to XML parsing

Service Component Architecture

Web Services Addressing

Business events

Atom feeds

RESTful interfaces

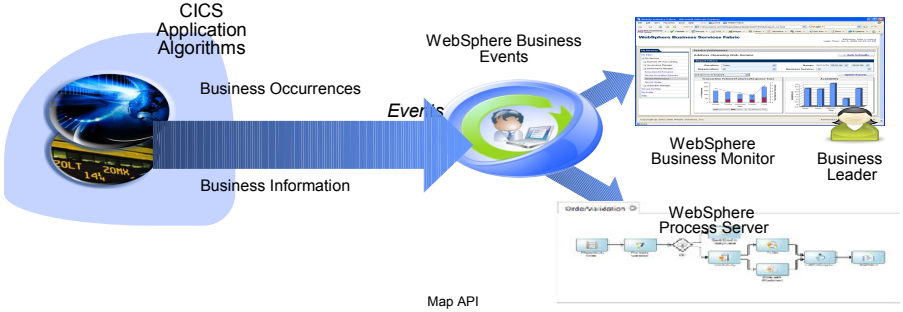
Service Component Architecture

Java 6

CICS Transaction Server V4.1

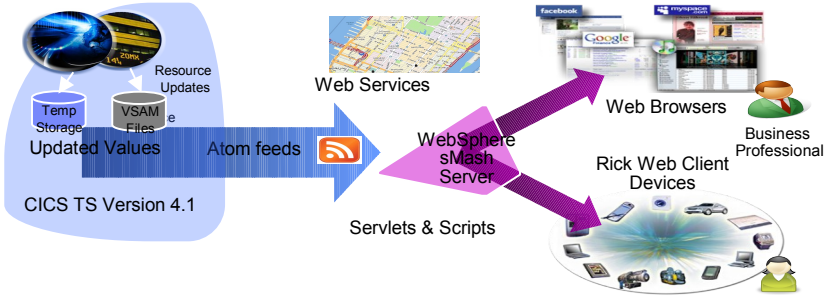
Transform Insight into Action with CICS Events and WBE

- Recognizes events via a 'pattern', no code change required
- Deploys dynamic event via integrated explorer tooling
- Improves scalability with Event recognition threading model – event recognition has its own thread.



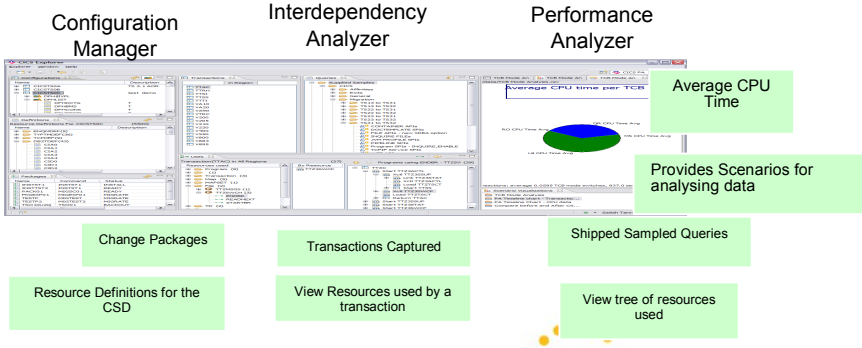
Access CICS resource business values as standard web resources

- Provides support for CICS files as atom feeds
- Uses built-in XML transformation services to reduce costs
- Delivers Admin and Config integrated with the CICS runtime



Increase operations productivity and extend Administrative Skills - CICS Explorer

- Updates CICS resources
- Helps include custom customer content
- Supports non CICSplex installations



Topics

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- Summary and Q&A

Major Plan drivers

Delivering Value

Modernisation

Skills

Cloud Computing

New and Enhanced Runtimes

Delivering Value

Modernisation

Runtimes

New!

CICS Transaction Server V4.2

TXSeries V7.1

New!

WXTR V1.0

CICS EXPLORER

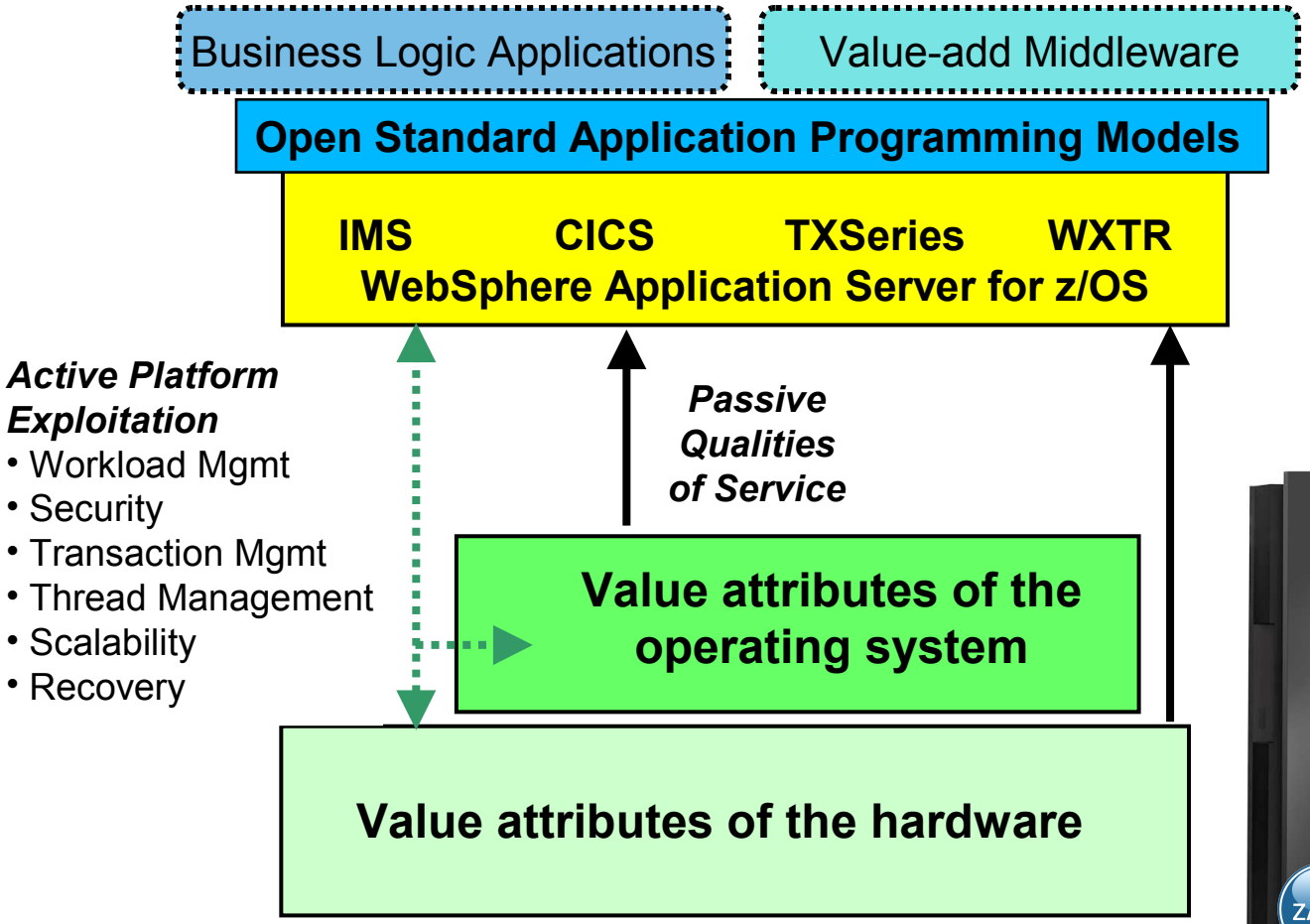
Tooling & Connectivity

CICS Tools

CICS TG

PD Tools

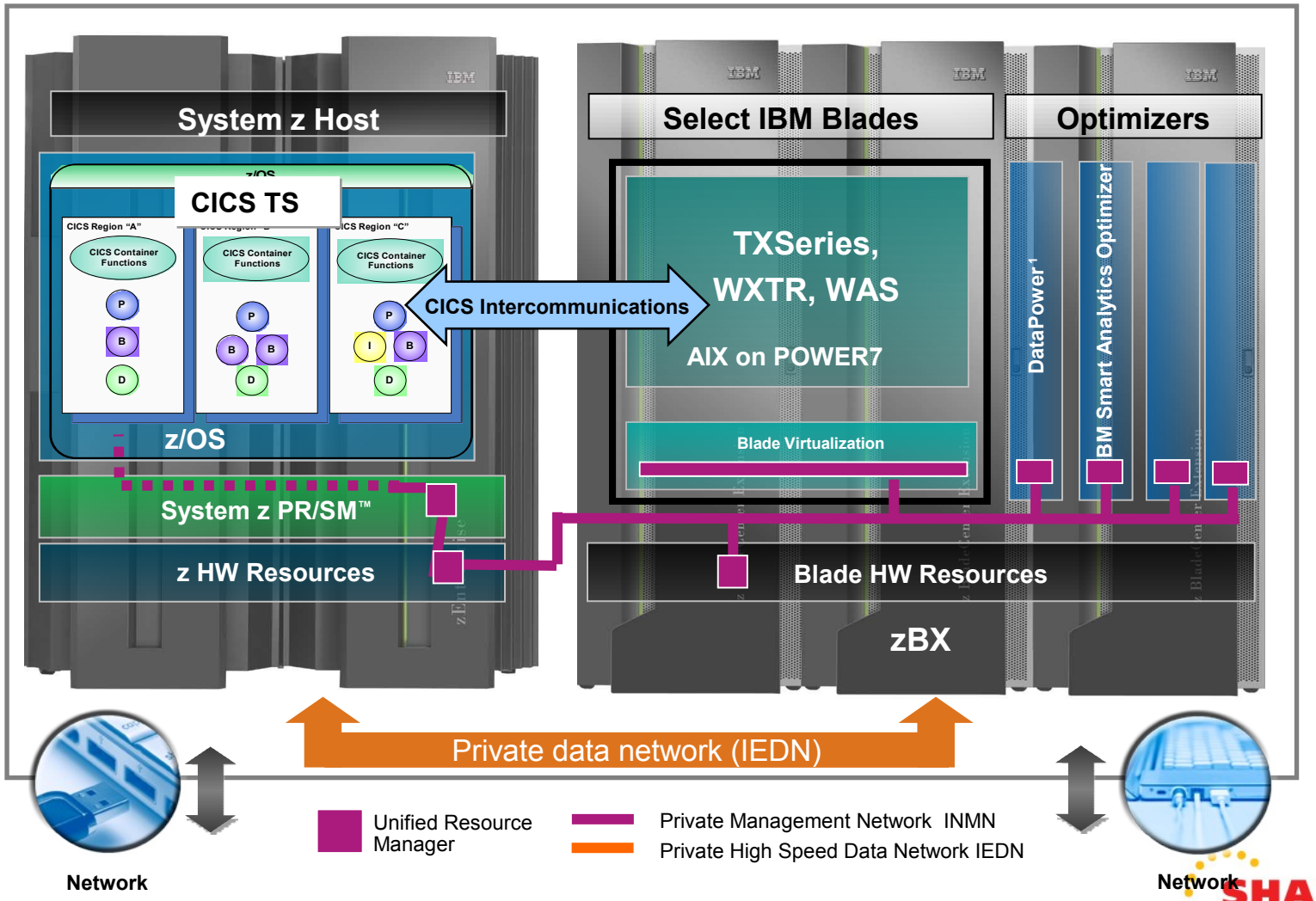
How the z platform delivers customer value



zEnterprise 196

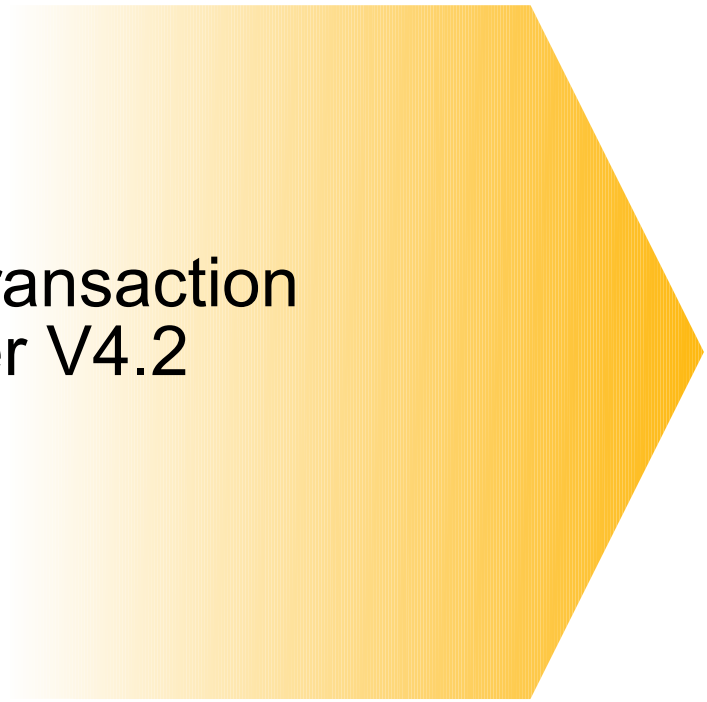
z BladeCenter Extension

CICS Exploitation of zEnterprise with zBX
– Consolidation on z
– Integration over fast channels

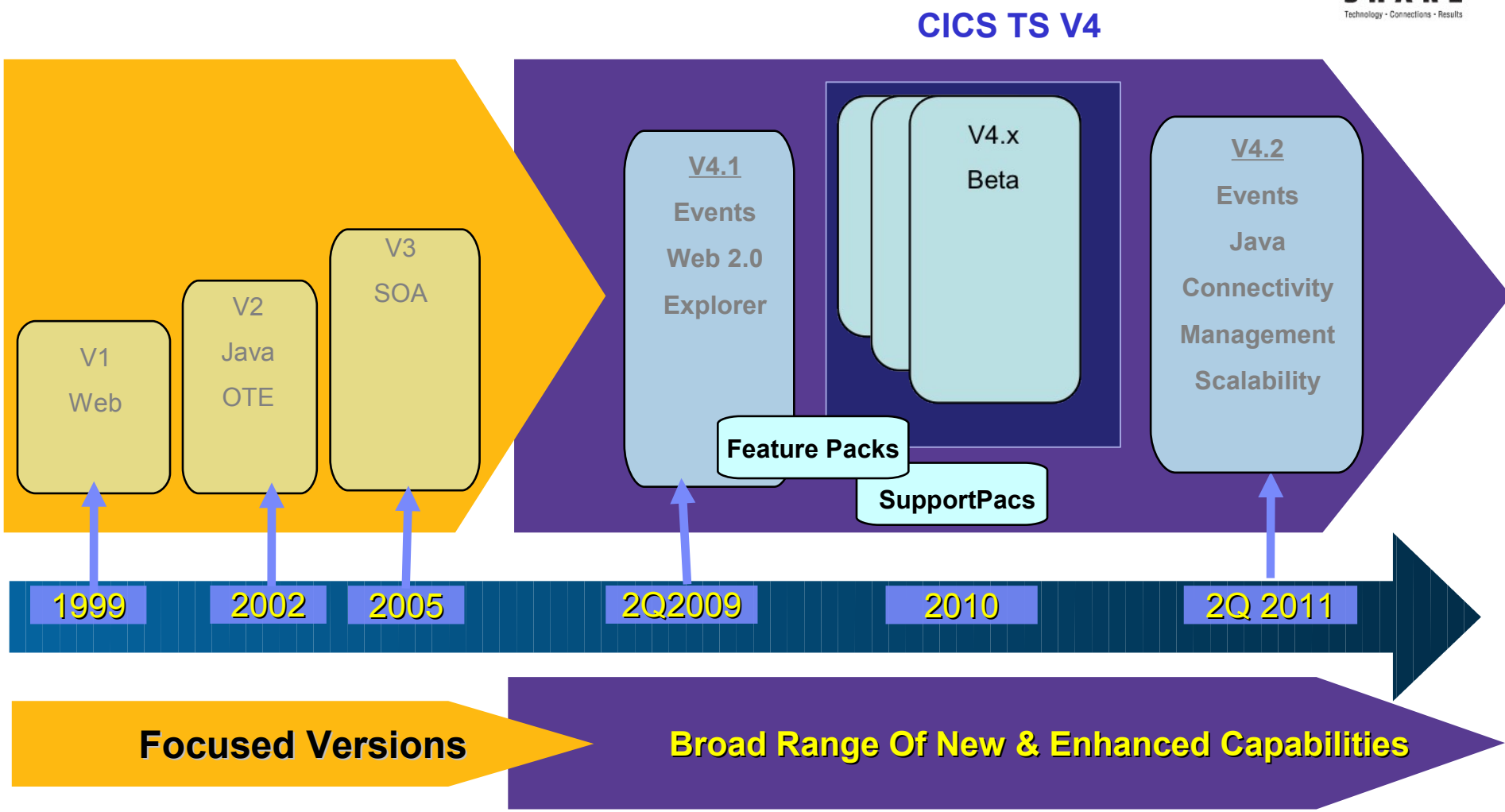


Recent Announcement

Announced on April 5th 2011



CICS TS Roadmap



CICS Transaction Server for z/OS V4.2

Announced on April 5th 2011
Available June 24th 2011

Java

- 64-bit Applications
- Multithreaded Server
- OSGi Management

Scalability

- More Threadsafe
- Optimised Threadsafe
- 64-bit Exploitation

Events

- System Events
- Assured Events
- Lifecycle Management

Management

- Transaction Tracking
- Workload Management
- Password Phrases

Connectivity

- Axis2 Web Services
- Web Services Offload
- HTTP & IP Extensions

a smarter transaction processing experience

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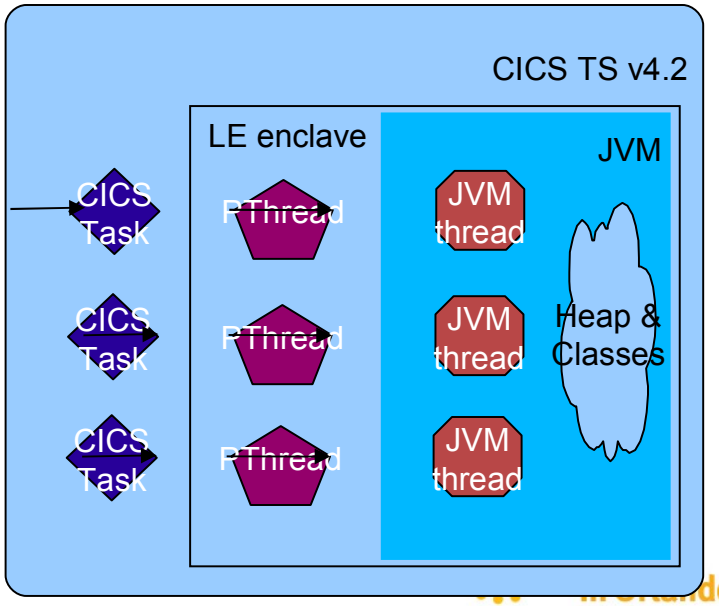
CICS V4.2 Java Enhancements

- New 64-bit multithreaded JVM Server
  - Initially just for System use in CICS 4.1
  - Now opened up for Customer Applications
  - Allows more Java applications to run in a single CICS Region and scales better than Pooled JVM model

- OSGi bundles support
  - Simplifies the administration and portability of Java Applications



Recent Announcement

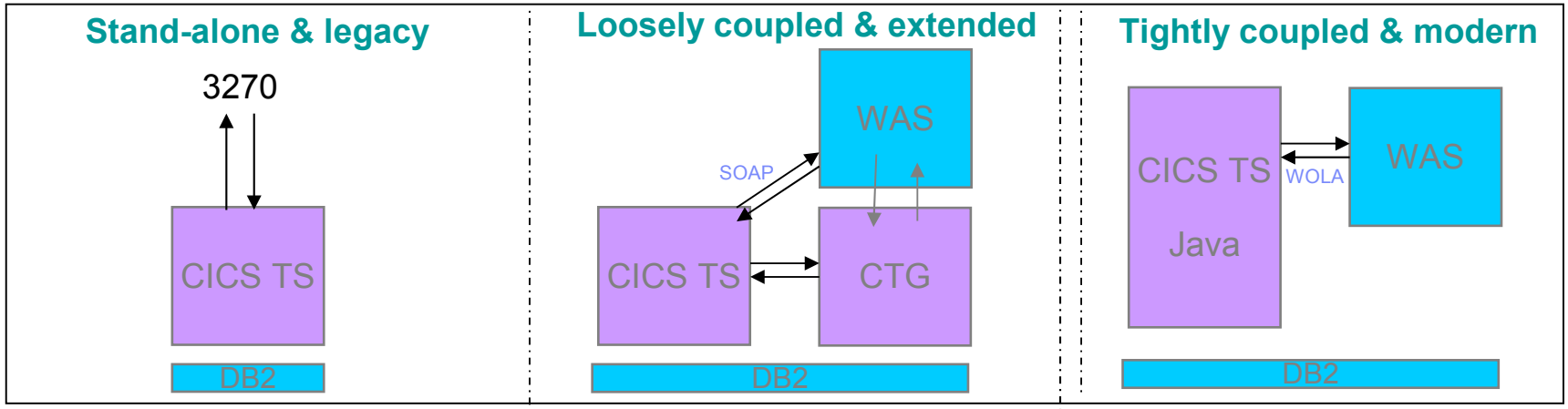
Announced on April 5th 2011

Transaction Processing on z196 and System-z

Legacy applications, no Java requirement and modernization strategy

Traditional applications extended into JEE environments

Highest performing, mixed language application hosting

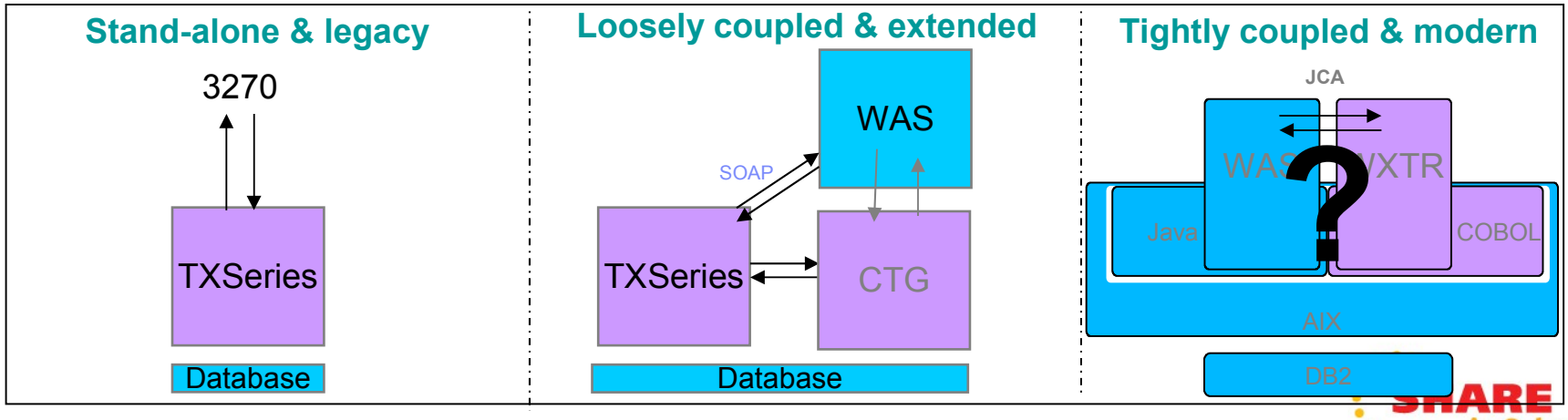


Transaction Processing on zBX and System-p

Legacy applications, no Java requirement and modernization strategy

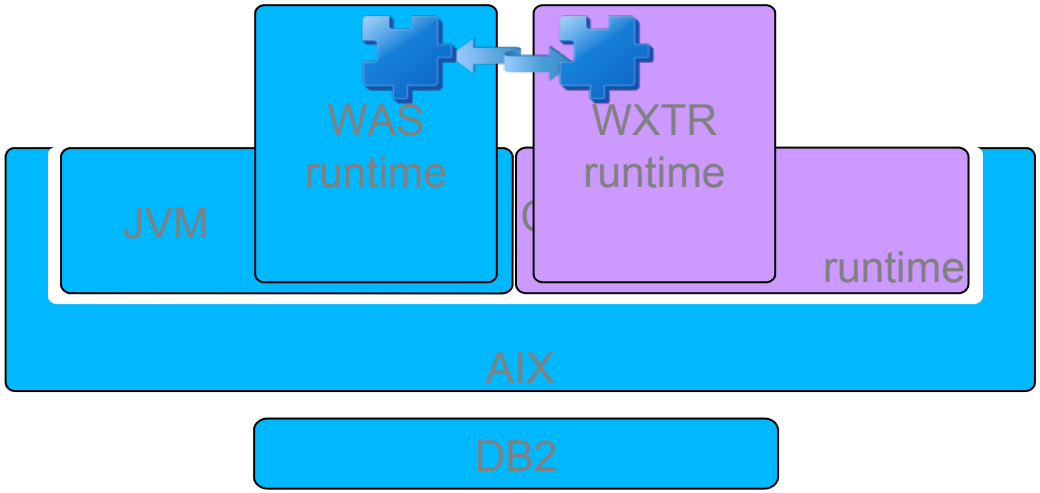
Traditional applications extended into JEE environments

Highest performing, mixed language application hosting



WXTR: Key offering Highlights

WebSphere eXtended Transaction Runtime provides:



Tightly Coupled Application Environment for AIX

- **WAS** to host Java EE applications inside JVM
- **WXTR** to host COBOL applications inside Cobol Runtime
- Java applications call Cobol programs via JCA and SCA based standard interfaces
- WXTR used standard WAS services where possible

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WXTR: Key offering Highlights

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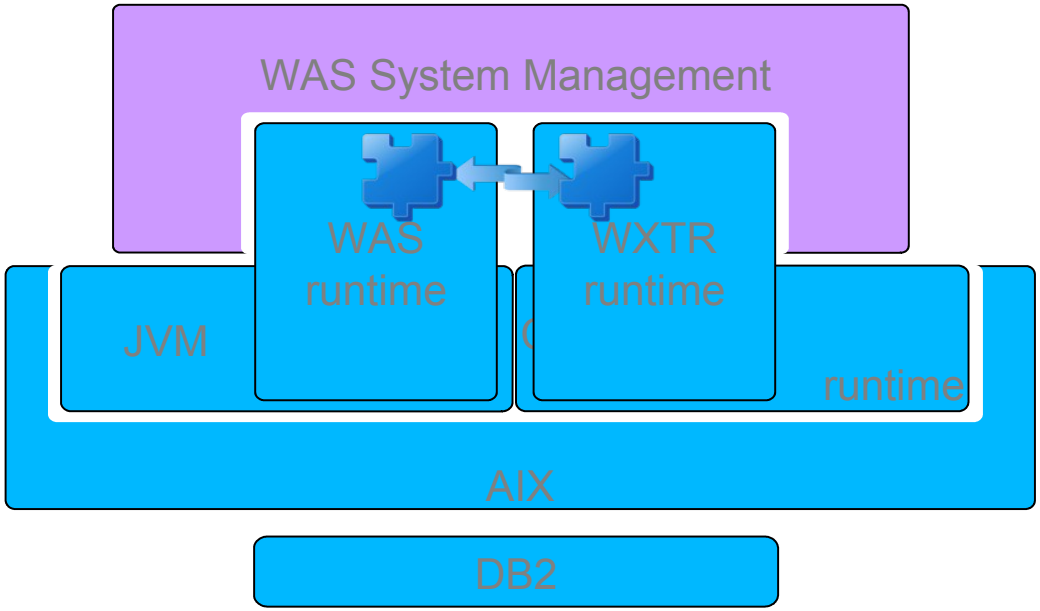
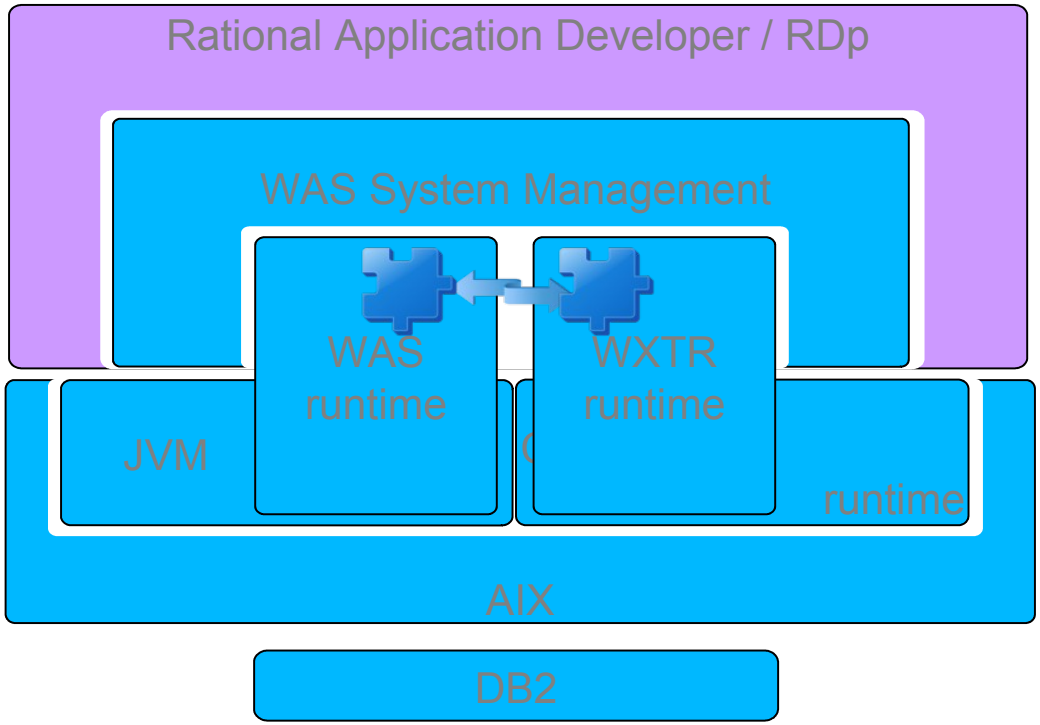


Unified System Administration

- Provides a common administration facility for managing both COBOL and Java EE assets within the WebSphere Application Server administration console

WXTR: Key offering Highlights

WebSphere eXtended Transaction Runtime provides:



Integrated Application development and debugging

- Provides integrated development environment using IBM Rational Developer for Power Systems Software and IBM Rational Application Development for WebSphere Software

Major Plan drivers

Skills

- Simplification
- Automation
- Standardisation

Skills

IBM CICS Explorer™

SM	CICS Transaction Server
IA	CICS Interdependency Analyzer
PA	CICS Performance Analyzer
CM	CICS Configuration Manager
DA	CICS Deployment Assistant
TG	CICS Transaction Gateway

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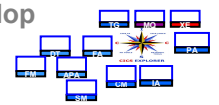
Technology · Connections · Results

New!

Develop
Test
Etc



RDz

Deployment
Discovery,
Visualization,
Automation & Control

DA

Execution Tree
Dependencies
Queries
Command Flow

IA

Threadsafe, File, CPU,
Response Time analysis
Graphical and
Sheet views

PA

CICS, IMS, DB2,
& z/OS
Observation Requests
& Reporting

APA

CRUD/Install
Control, Filter
Topology
Events, ATOM

SM

Daemon &
Connection
Status & Test

TG

CRUD/Install
History, Audit
Backout
Search, Compare

CM

CICS, IMS,
DB2, & z/OS
Application
Debugging

DT

CICS, IMS, DB2,
& z/OS
Abend Reporting
& Diagnosis

FA

CICS TS

APA	Application Performance Analyzer
FA	Fault Analyzer
DT	Debug Tool

MQ	WebSphere MQ
XE	OMEGAMON XE for CICS
RDz	Rational Developer for System z

Status
Situations
Topology

XE

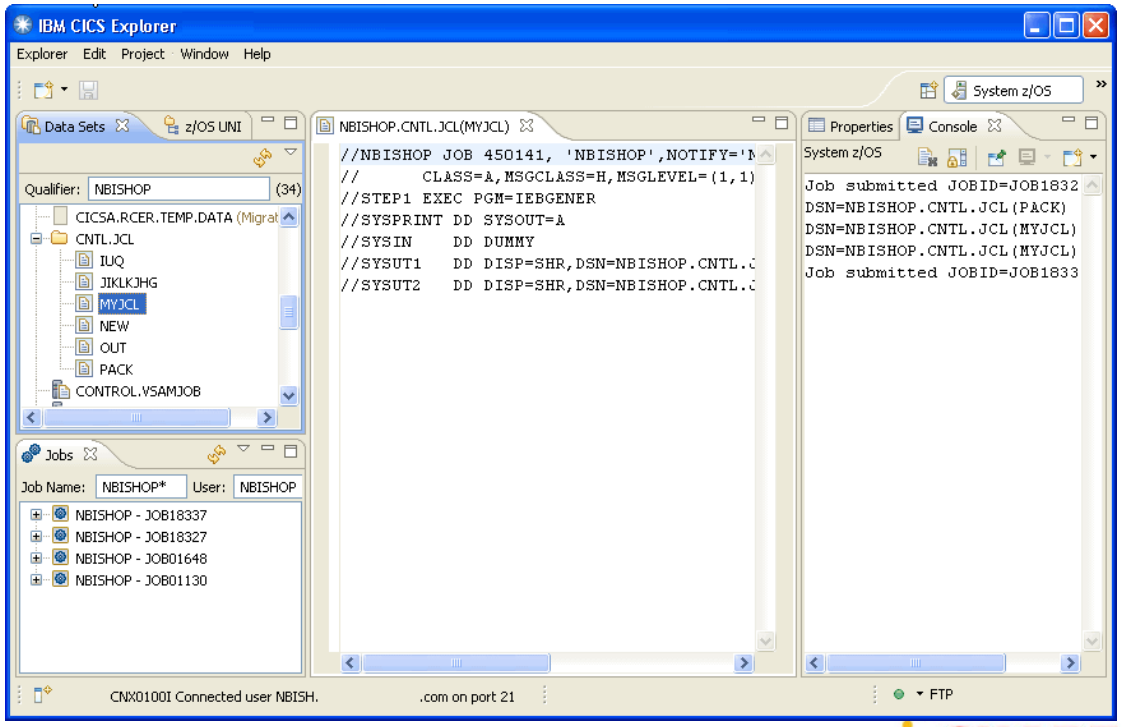
Configuration
Status
Control, Test

MQ

ndo

CICS zOS System Explorer V1.01

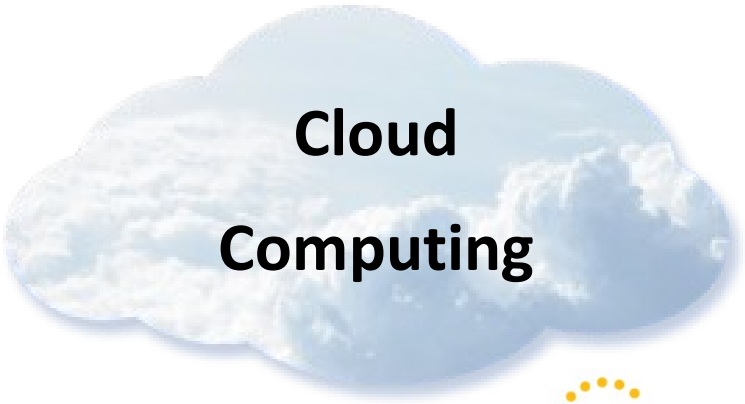
- Adds support for the z/OS assets perspective
- Contains new views to help you manage selected z/OS assets
  - Edit and view zOS Data Sets,
  - Submit Jobs
  - Access z/OS Unix Files
  - View the System Console



Major Plan drivers

Cloud Computing

- Agility
- Elasticity
- Dynamic infrastructure



Cloud

- **IBM has been in the Cloud Business for over 45 years**
  Beginning with Mainframe Virtualization, IBM has been innovating on the technology underpinnings of Cloud

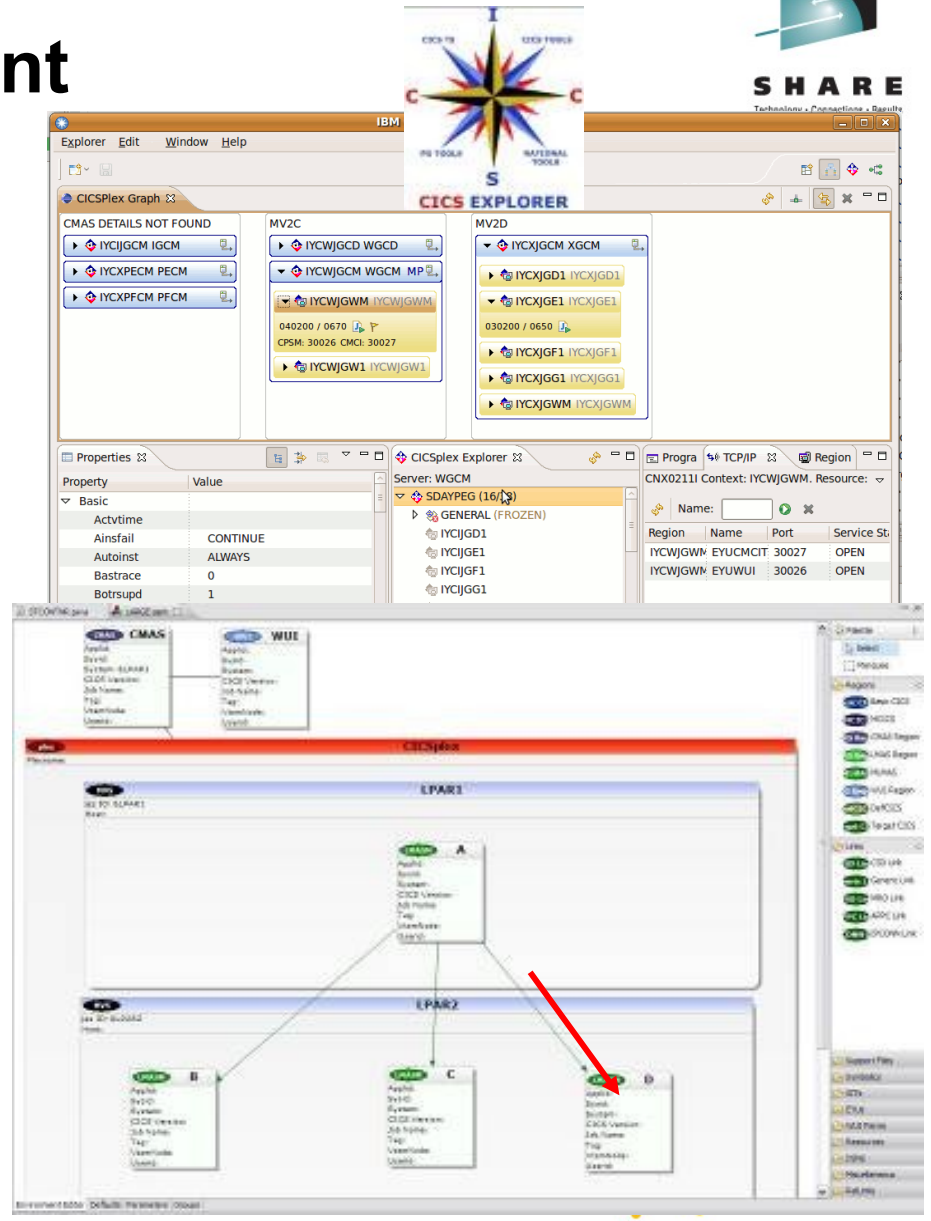
- **IBM zEnterprise is the industry's only heterogeneous cloud solution**
  Combines cloud characteristics with System z's leading capabilities for efficiency, manageability, scalability, and security

- **IBM Cloud Computing on System z is transforming the business**
  Better qualities of service, advanced workload optimization, and efficient resource consolidation

CICS Deployment Assistant

- Announced: 22 July '10 GA: 24 Sep '10

- New deployment perspective integrates with CICS Explorer
- Discovery and modelling of CICS systems and applications
- Advanced topology visualization
- Automated creation, deployment, customization, and control of CICS regions
- Edit files, submit JCL, view output
- Best practice cheat sheets assist CICS version upgrades and CICSPlex SM set-up



Topics

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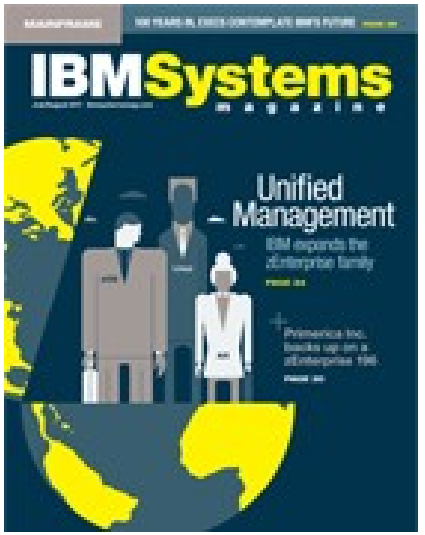
CICS in the news

CICS Explorer
CICS Transaction Gateway
CICS Performance And Tuning

CICS TS V4.2 Business Value

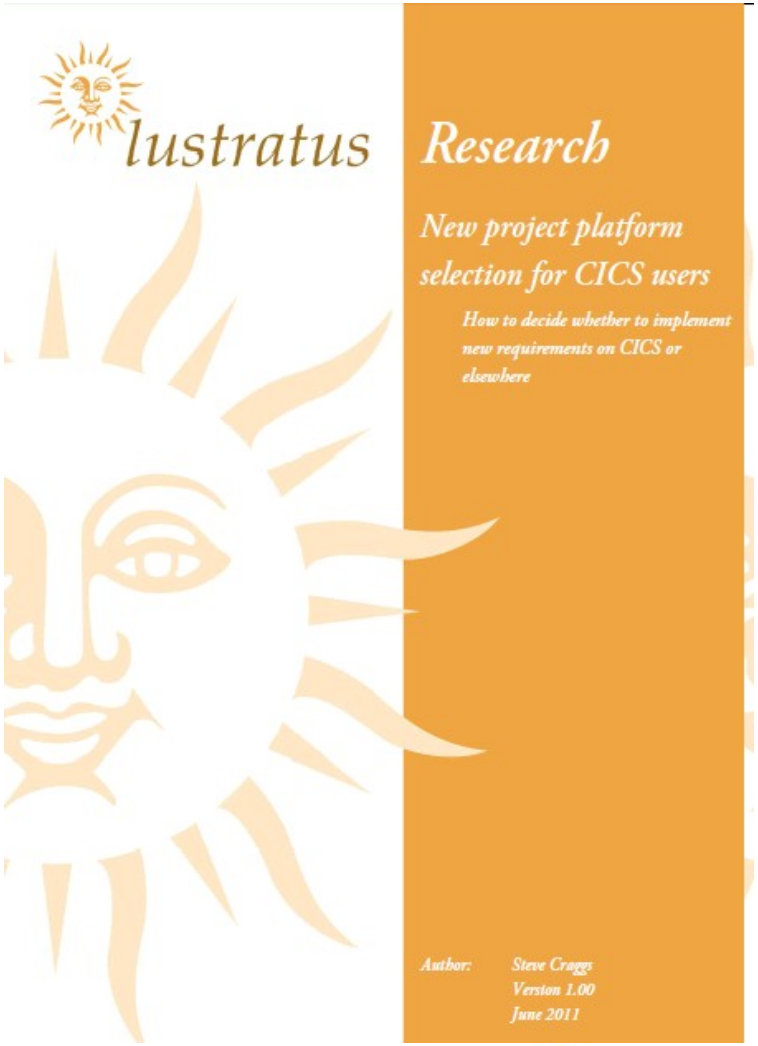


CICS TS V4.2 Business Value
CICS TS V4.2 Tech. O/view

Analyst Research paper

Lustratus paper on new platform Selection for new projects for CICS users

Customer interviews & examples
Independent balanced view



CICS Development Technical Services

Helping to solve Business Problems and exploiting new Business Opportunities

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 Smart Seminars

Free customised technical agenda of CICS TS and CICS tools products

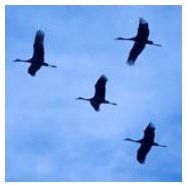
- Web Services, Events, Web 2.0, Java version upgrades, tooling etc.

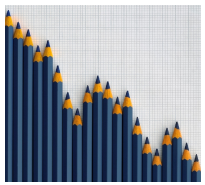
Targeted at AD, System Programmers and Architects at customers' own location

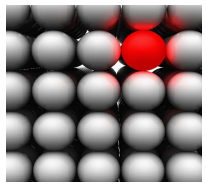
Demonstrates how to use the new features in the latest releases to leverage existing solutions

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

Can be tailored to customers interests







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CICS Development Technical Services

- **Upgrade Services**
  - Efficiently update your CICS environment to the latest version to exploit new CICS features such as: Web services, IP connectivity, CICS Explorer, Event Processing, Web 2.0, Atom Feeds and PHP scripting in CICS
- **System Health Check**
  - Ensures that your CICS environment is functioning optimally. Our Best Practice Review will check your CICS configuration parameters and values and provide a report with recommendations to improve the running of your CICS business systems
- **Security and Governance**
  - This services helps you assess and ensure the security and compliance of your CICS assets. We provide a security and vulnerability Risk Assessment and make recommendations of how best to secure your CICS assets
- **Performance Optimization**
  - Get the most out of your environment, improved performance equals lower cost. We review CICS performance data from SMF records and/or CICS tooling to provide tuning recommendations and Capacity Planning advice
- **Web Services Enablement**
  - Unlock and re-use your CICS business assets in the connected world of SOA. We provide education and implementation for CICS Web services support including Rational Developer for z tooling. We can help with identifying assets for re-use in an application and legacy modernization project
- **Integration and Connectivity**
  - We provide consultancy for migration from SNA to IP connectivity as well as using connection technologies such as the CICS Transaction Gateway and Web services to provide the availability of your CICS business assets to a wider audience in an SOA
- **Systems Management**
  - Our Systems Management offering is aimed at ensuring that your CICS environment is being managed to Best Practice standards. The engagement may range from a short analysis of the CICS Systems Management tools techniques used in your enterprise, to a full implementation of CICSPlex SM, CICS Explorer and other IBM CICS Systems Management products

Customized Workshops

- We offer Customized Workshops to meet your education needs for the CICS Family of products. These workshops are staffed by senior CICS developers and can be run either at your location, or at an IBM location that meets with your preference.

Summary

- CICS V3 MLC Price Increase
  - Reflecting the significant new function available since initial GA
- CICS V4.2 is our latest and richest offering to date
  - Rock Solid Container for running business critical applications
  - Supports modern languages and programming models
  - Major enhancements to support Java programs
- WXTR V1.0 extends the scope and reach of WebSphere
  - Adds support for running Cobol alongside Java J2EE apps
  - Enables re-use of existing Cobol Business Logic in a new Form Factor
  - Initially supports the CICS Programming style; others such as Tuxedo to follow
- Don’t forget enhancements in CICS TG V8, TXSeries V7.1, CICS Tools, PD Tools and RDz

Q&A

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