CICS Family: Executive Overview, Trends and Directions

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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
Each red pin is a geographic location where CICS TS is installed.

Many locations (i.e., New York), have very many customers!!
Each **Green** pin is a geographic location where CICS TS V4.1 is installed. Many locations (i.e., New York), have very many customers!!
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:

**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
- Web Services Addressing
- WebSphere Registry & Repository Support
- Support for distributed identities
- Resource signatures

**Business events**
- Atom feeds
- RESTful interfaces
- Service Component Architecture
- Java 6

**CICS TS 4.1**

**Compete**
**Control**
**Comply**
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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• CICS Product Directions and Announcements

• Summary and Q&A
Major Plan drivers

- Delivering Value
- Modernisation
- Skills
- Cloud Computing
New and Enhanced Runtimes

Delivering Value

Modernisation

Runtimes
- CICS Transaction Server V4.2
- TXSeries V7.1
- WXTR V1.0

Tooling & Connectivity
- CICS Tools
- CICS TG
- PD Tools
How the z platform delivers customer value

**Open Standard Application Programming Models**

- IMS
- CICS
- TXSeries
- WXTTR
- WebSphere Application Server for z/OS

**Active Platform Exploitation**
- Workload Mgmt
- Security
- Transaction Mgmt
- Thread Management
- Scalability
- Recovery

**Passive Qualities of Service**

**Value attributes of the operating system**

**Value attributes of the hardware**

**Value-add Middleware**

**Business Logic Applications**
CICS Exploitation of zEnterprise with zBX
– Consolidation on z
– Integration over fast channels
Recent Announcement

Announced on April 5\textsuperscript{th} 2011

CICS Transaction Server V4.2
CICS TS Roadmap

Focused Versions

1999 V1 Web
2002 V2 Java OTE
2005 V3 SOA

2002 2Q2009 V4.1 Events Web 2.0 Explorer
2010 Feature Packs

2010 V4.x Beta

2Q 2011 V4.2 Events Java Connectivity Management Scalability

Broad Range Of New & Enhanced Capabilities
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

Events
• System Events
• Assured Events
• Lifecycle Management

Connectivity
• Axis2 Web Services
• Web Services Offload
• HTTP & IP Extensions

Scalability
• More Threadsafe
• Optimised Threadsafe
• 64-bit Exploitation

Management
• Transaction Tracking
• Workload Management
• Password Phrases

a smarter transaction processing experience
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

WebSphere eXtended Transaction Runtime (WXTR)
**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**

**Stand-alone & legacy**

- 3270
- CICS TS
- DB2

**Loosely coupled & extended**

- SOAP
- WAS
- CICS TS
- CTG
- DB2

**Tightly coupled & modern**

- CICS TS
- Java
- WAS
- DB2

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**Transaction Processing on zBX and System-p**

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**Tightly coupled & modern**

- JCA
- WAS
- TXSeries
- CTG
- AIX
- COBOL
- WOLA
- DB2

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WXTR: Key offering Highlights

**WebSphere eXtended Transaction Runtime provides:**

- A 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
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:**

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

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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

- Simplification
- Automation
- Standardisation
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

- Agility
- Elasticity
- Dynamic infrastructure
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

- 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

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

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

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

Customer interviews & examples
Independent balanced view
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
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 service 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

I ♥ CICS
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