

## 16370 CICS Project Opening and Project Update

Dave Jeffries – CICS Director Andy Bates – CICS TS Product Manager

> Insert Custom Session QR if Desired.







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# Can CICS really be a Cloud?







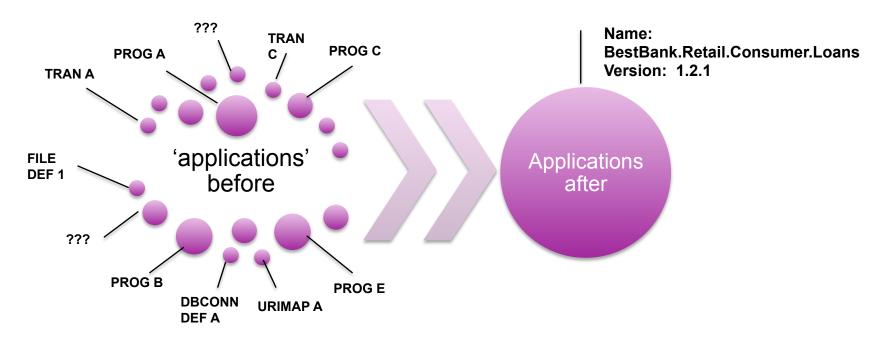
# What are you waiting for?

SHARE in Seattle 2015

# Cloud & DevOps



Packaging CICS resources into an application bundle means they can be deployed, managed, and monitored throughout the lifecycle as a single entity



## The Forecast is Cloudy...



Complete your session evaluations online at www.SHARE.org/Seattle-Eval

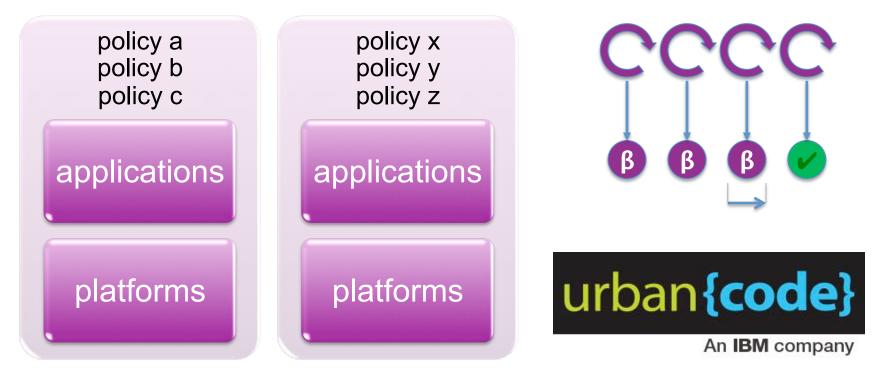
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# **Cloud & DevOps**



in Seattle

Applications, running on Platforms, managed according to a set of Policies, and deployed using DevOps





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# Cloud & DevOps





## The Forecast is Cloudy with a Strong Chance of DevOps

Throw away your umbrellas - CICS reigns

### CICS Cloud & DevOps : Key SHARE in Seattle 2015 sessions

- #16406 Mon 3:15PM What's New In the IBM Problem Determination Tools
- #16567 Wed 4:30PM Five CICS Multi-Versioning Scenarios that Reduce the Risk of Change
- #16563 Thu 1:45PM CICS Cloud + CICS DevOps = Agility^2
- #16571 Thu 3:15PM CICS Policy Based Management There's a New Sheriff in Town
- #16522 Thu 3:15PM IBM DevOps Solution: Collaborative Development





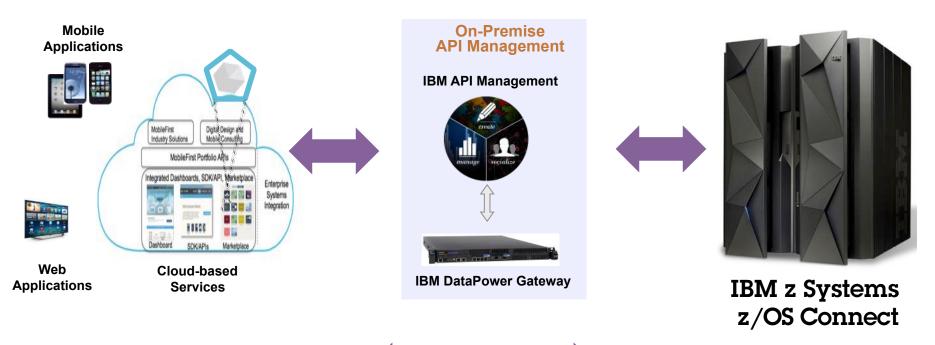
# Mobile & APIs





# Mobile & APIs





### **Systems of Engagement**

### z/OS Connect does exactly what it says on the tin

SHARE in Seattle 2015

Systems of Record

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# Mobile & APIs





## 1 Billion Smartphones a Year and Counting...

Don't be an Angry Bird – let CICS make you 'appy

### **CICS Mobile & APIs : Key SHARE in Seattle 2015 sessions**

#16564 Mon 1:45PM	1 Billion Smartphones a Year and Counting How is Your CICS Connected?
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- #16380 Tue 1:45PM z/OS Connect: Opening up z/OS Assets to the Cloud and Mobile Worlds
- #16556 Wed 10:00AM CICS and the New SOA: What You Don't Know Might Help You
- #17170 Wed 1:45PM VSP: CICS Integration & Optimization: Tales from the Trenches



# Java & Liberty





New IBM z13 delivers:

- New 5.0 GHz 8-Core Processor Chip
- 480Mb L4 cache to optimize data serving

New z13 features tailored and co-designed with Java include:

- Simultaneous Multi-Threading (SMT)
- Single Instruction Multiple Data (SIMD)
- Cryptographic Function (CPACF)
- New Instructions

Up to 50% improvement in throughput for generic applications

Up to **2X** improvement in throughput per core for security enabled applications

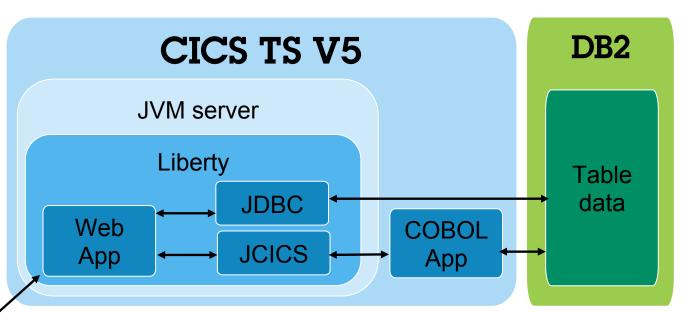


# Java & Liberty



CICS TS V5.2 supports more than 25 WebSphere Liberty Profile Features, including:

- Servlets
- JSPs and JSFs
- z/OS Connect
- JAX-RS & JAX-WS
- JSON & SSL
- JDBC & JTA
- JMX
- Blueprint
- OSGi





## What will you do with the worlds most advanced mixed language application server?



# Java & Liberty





## The world's most advanced mixed language application server

The mainframe is not a coffee machine, but it does do awesome Java

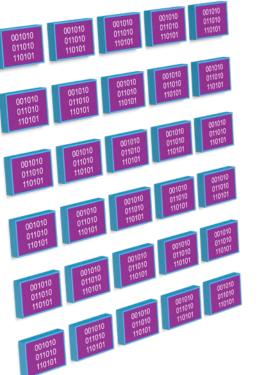
### CICS Java & Liberty: Key SHARE in Seattle 2015 sessions

- #16562 Mon 3:15PM Liberté, Égalité, Fraternité a Mini CICS and WebSphere Revolution
- #16381 Tue 3:15PM WebSphere Liberty Profile and T-WAS What's New?
- #16566 Wed 3:15PM Raising Healthy Java apps in CICS using the Java Health Center
- #16569 Thu 1:45PM Dynamic Business Rules and Other Things You Didn't Think CICS could do



# **Cost Optimization**





#### **IBM Benchmark results:**

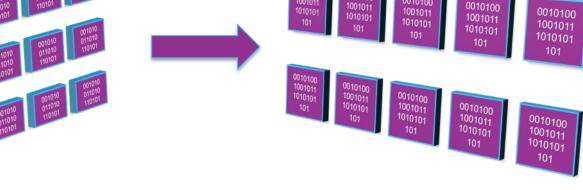
Consolidate 30 regions down to 10

1001011

- Decrease CPU usage by 10%
- Reduce the management burden by 2/3

0010100

Maintain the same workload



## Greater capacity enables cost savings through consolidation



Complete your session evaluations online at www.SHARE.org/Seattle-Eval

# Cost Optimization



### CICS Tools for z/OS

Essential tools for improving ROI of CICS TS investments

"We've embraced Threadsafe functionality to help us cut our CPU usage by 550 million instructions per second, or about US\$440K in annual operating expense..."



### PD Tools for z/OS

#l ranked family of problem determination tools for z/OS

"We've increased programmer productivity by 10 percent and cut development costs. Not only that, but we've experienced significant decreases in the number of transaction failures within our applications."



## Optimize, Diagnose and Modernize your z/OS resources



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# Cost Optimization



## Show me the Money!

**CICS: Cost Improvement Charmingly Simple** 

### **CICS Cost Optimization : Key SHARE in Seattle 2015 sessions**

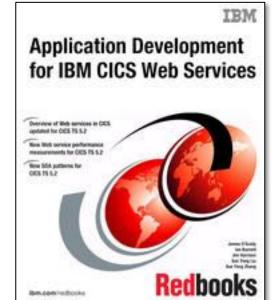
- #16565 Tue 10:00AM CICS TS V5 Performance Improvements that you Definitely Don't Know About
- #16548 Tue 11:15AM CICS Performance and Tuning 101
- #16551 Tue 3:15AM CICS Extreme Performance



# Generation z





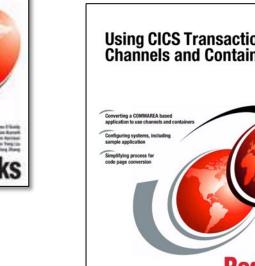


Download on the **iBookstore** 

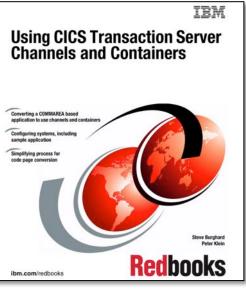


### New skills are not just for new hires!

Complete your session evaluations online at www.SHARE.org/Seattle-Eval



A few new or updated IBM Redbooks, published in the last 6 months





# Generation z

Wanna play?



## Calling all new mainframers

Skill up and work some mainframe magic

### **Generation z & Core Skills: Key SHARE in Seattle 2015 sessions**

- #16519 Mon 4:30PM AD Tools: RDz, RTCz and the RTCz ISPF Client Hands-on Lab
- #16377 Tue 3:15PM Modernizing CICS Hands-on Lab (double session)
- #16733 Thu 11:15AM Mainframe Skills the Myth and the Reality
- #16572 Fri 10:00AM You Asked, We Delivered: Workload Management in the CICS Explorer



# **CICS** Certification



IBM Certified System Programmer - CICS Transaction Server V5.2 for z/OS

IBM Certified Application Developer - CICS Transaction Server V5.2 for z/OS

## **IBM** Professional Certification

Complete your session evaluations online at www.SHARE.org/Seattle-Eval

CHECKLIST





# What's next?



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# **Open for Business**



## IBM CICS Transaction Server V5.3 open beta



**Service Agility** 

Enhanced support for Java and the WebSphere Liberty profile



**Operational Efficiency** 

Performance optimizations, enhanced metrics and additional security



**Cloud with DevOps** 

New cloud and DevOps support to automate CICS deployments

#16568 Mon 4:30PM The Future of CICS is Closer than You Might Think

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# **Open for Business**



Enhanced sup	oport for Java and the WebSphere Liberty profile				
Additional Liberty profile features to call each other using standard CICS API calls. This technology pre enables:		CICS TS V5.3 open beta : Operational Efficiency Performance optimizations, enhanced metrics and additional security			
Enhanced interoperability	<ul> <li>Java applications to use the standard JEE Connector Architectur</li> </ul>			×	
interoperability	<ul> <li>Java applications to use the standard JEE Connector Architectur invoke CICS programs in any supported language.</li> </ul>	Web service	Web services are one of the most popular methods of interacting		
	<ul> <li>Non-Java CICS programs to issue an EXEC CICS LINK to call a J application running in a Liberty profile JVM server.</li> </ul>	optimizations	applications. The CICS TS V5.3 open beta offering delivers a numb significant optimizations in this area.		
	Additionally, the Liberty z/OS Connect feature is now supported by the V5.3 open beta offering*. This provides <u>BESThyl</u> APIs and accepts Ja Object Notation (JSON) payloads between CICS, mobile devices, an environments.		The pipeline processing of HTTP requests has been improved, rer need for an intermediate web attach task (CWXN transaction) in th use cases. This will reduce the CPU and memory overhead for mo	CICS TS V5.3 open beta : Cloud with DevOps	
			SOAP and JSON-based HTTP CICS web services.	New cloud and DevOps support to automate CICS deployments	
	* Also available in CICS TS V5.2 via APAR PI25503.		This optimization can also be used for inbound HTTPS requests, v support is provided by the Application Transparent Transport Laye		IBM UrbanCode Deploy orchestrates and automates the deployment of applications, middleware configurations, and database changes. An updater
			AT-TLS) feature of IBM Communications Server. CICS TCPIPSEF resources can be configured as AT-TLS aware to obtain security i from AT-TLS.		CICS TS beta plug-in for UrbanCode Deploy supports the deployment of CICS applications as part of these orchestrations.
			HTTPS implementations that use CICS-provided SSL support still	Ultra Code Danlau	Using UrbanCode Deploy, multiple deployment steps can be coordinated in
			CWXN transaction. However, multiple TCB switches have been eli these scenarios. Therefore, these implementations should also se	UrbanCode Deploy support	single action. Deployment processes can be reused for similar applications environments, such as development systems or more tightly-controlled test production environments.
			improvements.		The CICS TS beta plug-in for UrbanCode Deploy provides functions for inst

## ibm.biz/cics53beta



and removing resources, NEWCOPY and PHASEIN for programs, and performing a pipeline scan. Batch utilities, like DFHDPLOY, can be reused using

https://developer.ibm.com/urbancode/plugin/cics-ts/

An updated version of the UrbanCode Deploy plug-in for CICS TS V4.1 and later is available to download from the UrbanCode Deploy plug-in website. Visit

the z/OS utility plug-in.



# **Open for Insight**



## IBM CICS Operational Insights open beta



New Cloud based Service to identify opportunities to tune your CICS

Understand your operational characteristics to target improvements

Upload a snapshot of operational data and get a Threadsafe Assessment

## ibm.biz/cicsoibeta

Free of charge during open beta



# **Open for Testing**



## IBM CICS Transaction Gateway V9.2 open beta

**Enabling virtualized testing of CICS TS applications** 

- Front-end application testing without impacting mainframe MIPS
- Continuous integration testing for all remote CICS TG applications
- Allowing selective pass-through to live CICS servers

**Building on the capability released in CICS TG V9.1, including:** 

• Mobile (JSON web services) connectivity through to any CICS TS or TXSeries



# **Open for Business**



## Announced! TXSeries for Multiplatforms V8.2 (AIX and Linux x86)



- Significant enhancements for Performance
  - Up to 5x faster and 50% less memory consumption for large data exchanges over IP using containers & channels
  - Up to 40% faster performance for Micro Focus COBOL based applications
  - Improved transaction throughput for applications written in Java
  - Up to 40% improvement for batch applications with SFS



### Application Development Enhancements

- New COBOL compiler support on Linux with COBOL-IT
- Support for Visual COBOL compiler runtimes on all platforms
- Enable IBM COBOL application developers to simultaneously debug CICS applications

### ibm.biz/TXSeries82Announce





# What skills issue?



## #1 – Hire Good Young People And help them become great!



# We are Generation z: are you in? Y = Cics Hunsky </

### https://www.youtube.com/watch?v=pKNJ-KC3vvo

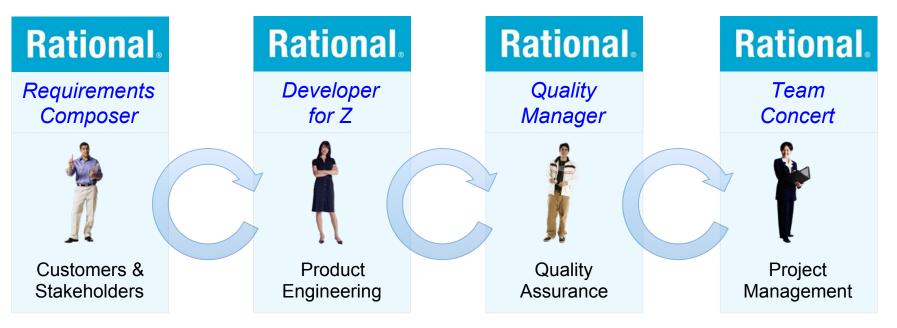
### • Hire people with the expectation they will be great in a few years

- Requires planning can't just use immediately on the toughest problems
- Requires commitment to both training and progression
- Learn from them at least as much as you teach them!
  - New graduates look at the world in new ways use this!
  - Many CICS innovations have come from new hires saying "I wonder if..."



## #2 – Give them modern tools and processes With tools that help them innovate





- CICS TS Development make extensive use of modern tooling
  - We are experimenting with IBM Watson for PMR analysis
  - We also use a good amount of open source, where it makes sense



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## #2 – Give them modern tools and processes

Processes that smooth the way and don't get in the way

### Rational Team Concert

- Project planning, tracking, dashboards, RFE's
- Source code development via EPICS and stories

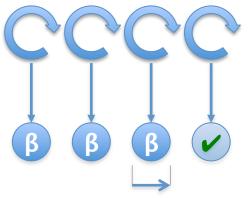
### Stories

- Sized in story points by whole team
- Planned into 4 week iterations
- Tracked by story point burn-down charts
- Closed when defects fixed, tests automated and 100% successful

### Testing

- Based on Agile Test Quadrants (Unit, FV, User, ST)
- Collaborative test planning
- Automated tests run daily on continuous delivery of code
- Customer scenario testing (CiP) product integration and multi release
- Continuous delivery
  - Daily builds, weekly iterations (increments), monthly betas













### Design Thinking practices fuel creativity and enthusiasm



### Hills

- Focus on problems and outcomes for users, not feature lists
- Cross-functional teams define, deliver and promote solutions



 $( \triangleright )$ 

### **Sponsor Users**

- Provide real domain expertise
- Ensure design for real target users, not imagined needs

### **Playbacks**

- Communicate hills, focusing on user value to be delivered
- Regular playbacks internally to wider team and externally to clients

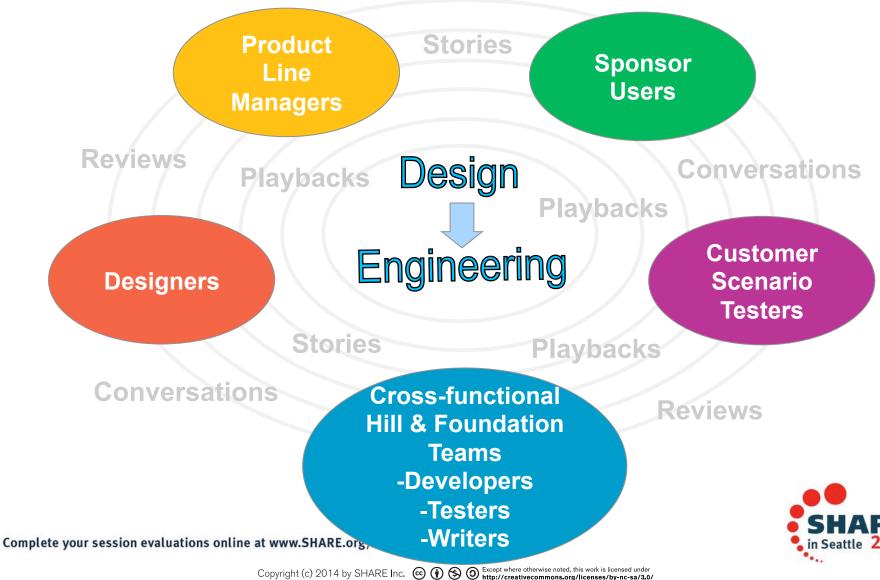
### **Technical Foundation**

• Separate team addresses RFEs, serviceability enhancements, infrastructure maintenance, etc



## In Summary - Continuous Collaboration





## Need expert help?



### CICS Development Services, for worldwide services assistance

Get a deep dive into your systems with a CICS health check	Move forward with mobile with our customized mobile workshop	Soar into the cloud with our tailored cloud workshop
Want to know more about <b>CICS and Java</b> ? We offer tailored Java education	Need to optimize your systems? Then ask about a performance optimization engagement	Need to modernise your workload in CICS? Ask about a integration and connectivity engagement
Get the low down on performance with a CICS performance workshops	Need some help upgrading to the latest release? Then ask about our upgrade workshop	Need to reduce cost by optimizing your systems? Then a performance optimization engagement may be for you
Need something different? Then we can build a <b>customized</b> workshop, just for you!	Visit ibm.com/cics then click 'Services'	<b>Availability</b> a concern? Then try our High Availability workshop

Bringing CICS development expertise directly to your doorstep

Email us CICSDTS@UK.IBM.COM

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## The Mainframe Mobile App Throwdown is back for 2015!

## Register now at **ibm.biz/mmathrowdown**

and submit your app by April 12th

Mobilize your mainframe in our fun app-building contest for z Systems clients & business partners!



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