CICS V5.1

Operational Efficiency and Service Agility with Cloud Enablement

# An introduction to…

…CICS Portfolio

CICS Transaction Server continues to power the planet

- CICS TS is the world's premier enterprise class transaction processor

- CICS TS enables customers to create and maintain a competitive advantage

- CICS TS continues to deliver innovative and essential new technologies

Large scale business critical workloads, some > 1bn transactions per day

Many of the worlds largest companies run their business on CICS

CICS web services is the most widely adopted CICS feature in recent history
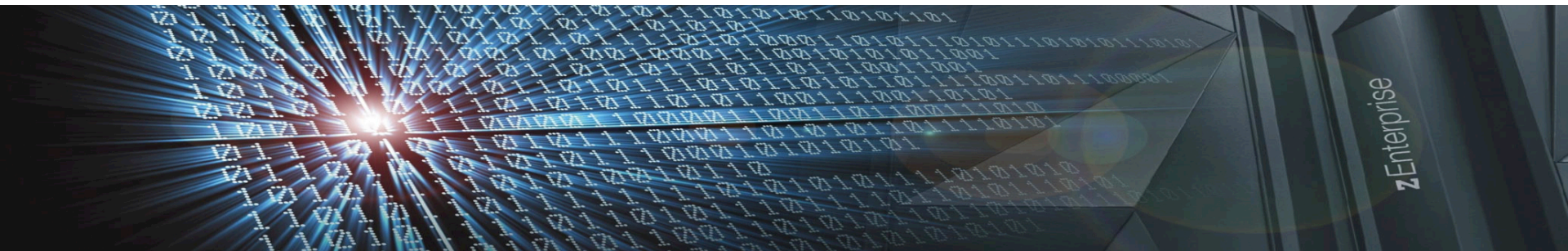
Focus on solving three key customer challenges

- Ongoing operational pressure to drive down costs and improve efficiency

- Increased business pressure to deliver faster and with greater agility

- Ability to manage and exploit the rapidly changing technology landscape

Operation Efficiency:
Controlling cost

Service Agility:
Deliver results faster

Cloud Enablement:
A long term investment
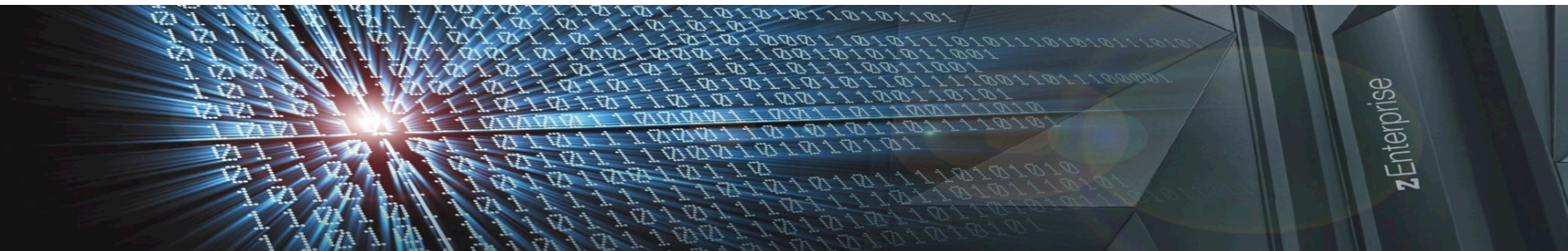
The new CICS Transaction Server V5.1 delivers…

Operational Efficiency

- *Greater capacity* - achieve cost savings through consolidation
- *Managed operations* - *reduce cost and risk through automation*
- *Increased availability* - reduce the need for planned downtime
- *Deeper insight* - *Improve decision making and audit readiness*

100+ requirements satisfied!

Service Agility

- *First-class applications* - create agile services from existing assets
- *First-class platforms* - create agile service delivery platforms
- *Modern interfaces* - build rich web experiences for critical applications
- *Foundational enhancements* - extend core capabilities

… *with Cloud Enablement*

consistent with the IBM Cloud Computing strategy
positions customers for the next transformational era in technology
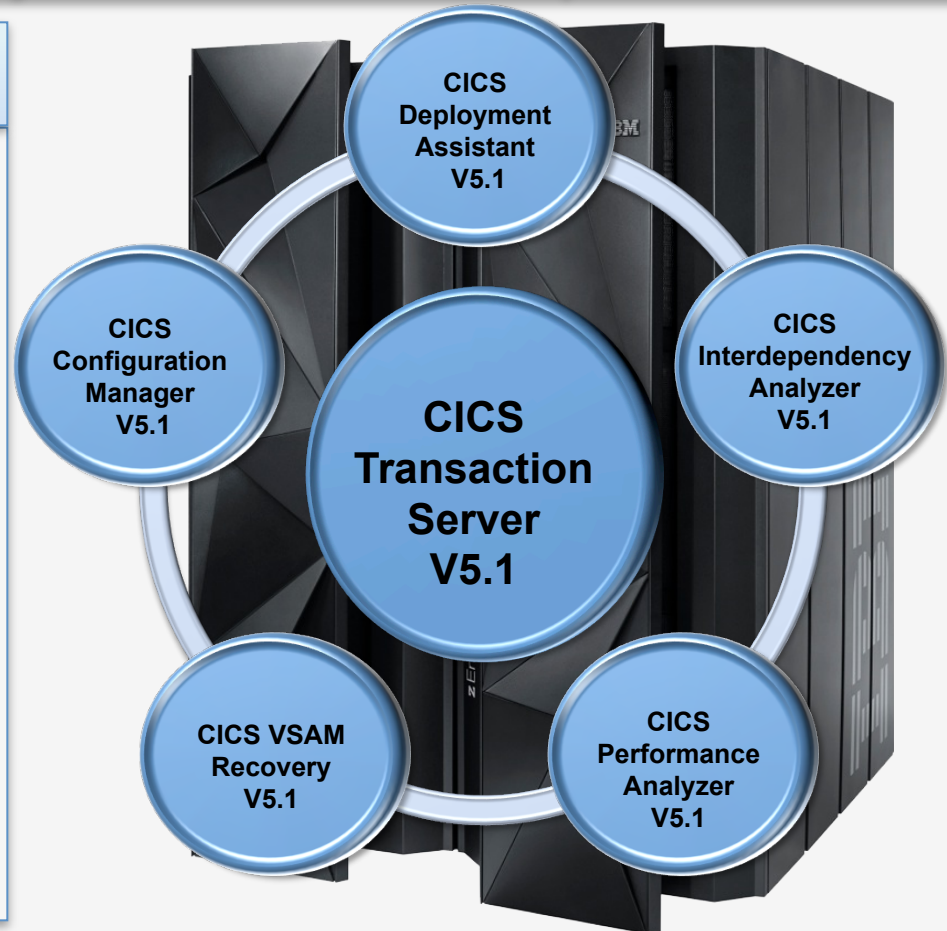moves towards a cloud oriented service delivery platform

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Upgrade and integrated core foundational tools suite - Five core CICS Tools – Day one CICS TS V5.1 exploitation

Fully integrated with CICS TS & CICS Explorer

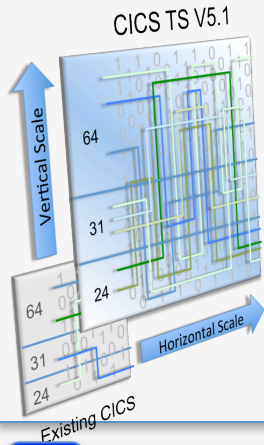Discovery and visualization aids insight into application and platform dependencies

• Automation speeds service delivery and ensures standardization and governance

• Modern, integrated user interfaces lower skills barrier

• Day-1 exploitation of CICS TS V5.1 new capabilities reduces time to value

• Five core tools support and extend the CICS runtime

CICS Deployment Assistant V5.1

CICS Configuration Manager V5.1

CICS Interdependency Analyzer V5.1

CICS Transaction Server V5.1

CICS VSAM Recovery V5.1

CICS Performance Analyzer V5.1

CICS TS V5.1 : Driving Operational Efficiency

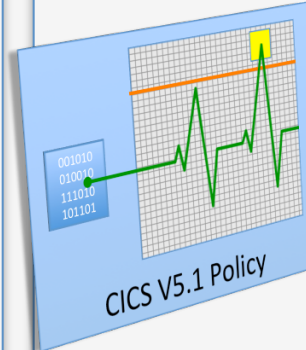## Greater Capacity

CICS TS V5.1

Vertical Scale

Horizontal Scale

Existing CICS

- Doubling the MAXTASK limit to 2,000
- Increased 64-bit and reduced 24-bit storage usage
- Greater parallelism from threadsafe API and SPI
- Greater system parallelism through optimized TCB usage
- Performance improvements from 64-bit Java 7
- Greater access to 64-bit storage from Assembler programs

Managed Operations

CICS V5.1 Policy

- Automated control over critical system resources
- Set data access thresholds on SQL or file access
- Set program loop thresholds on EXEC LINK
- Set storage request thresholds
- Set CPU time thresholds
- Policies can issue messages, abending tasks, or create events

Increased Availability

24x7

- Upgrade CICS versions and releases without requiring a z/OS restart
- Refresh Secure Sockets Layer (SSL) certificates
- Keep IPIC connections up and running
- Support more IBM GDPS/AA solutions
- Dynamically specify cross-system coupling facility groups
- Better reflect current best practices with updated and simplified defaults

Deeper Insight

- Auditing of SPI commands that alter the system
- Improved auditing of user IDs that make requests over IP
- Extended identity propagation to include started tasks
- Cipher suites used for SSL connections to be stored in the performance records
- Calculation of the actual and potential use of specialty processors
- Regular status updates provided while lost locks recovery is taking place

CICS TS V5.1 : Increasing Service Agility

First-class Applications

- Manage disparate resources as a single entity
- Rapidly move through the application lifecycle
- Automate dependency management
- Ensure rigorous yet flexible provisioning
- Measure entire application resource usage
- Dynamically manage applications with policies
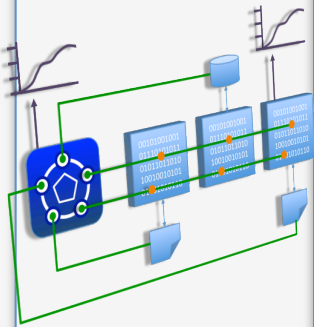
First-class Platforms

- Group new and existing regions as platforms
- Decoupling applications from the region topology.
- Automatic resource deployment and validation
- De-provision resources when requested
- Deploy applications to regions within a platform
- Dynamically manage platforms with policies
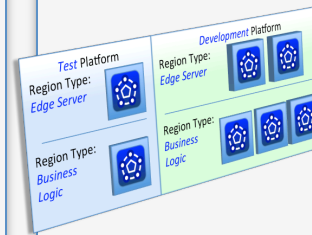
Modern Interfaces

- A production-ready web container
- Deploy lightweight Java servlets and JSPs
- Local access to CICS applications and data
- Roll-out of interface updates through OSGi
- Integration with applications and platforms
- Built on WebSphere Application Server Liberty profile for compatibility

Foundational Enhancements

- CICS supports "one-to-many" event emission
- Greater-than-32KB across MQ (DPL) bridge
- Enhancements to IPIC add IMS support
- Reduced application storage needs with GET and PUT container
- Backup and restore entire CICSPlex System Manager (CICSPlex SM) systems
- Automatic adjustment of the CICS clock for daylight saving time changes
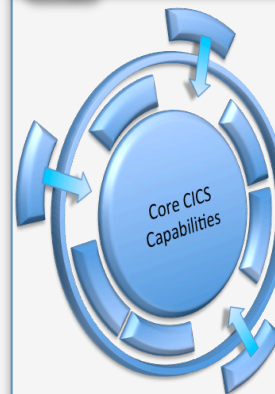
CICS TS V5.1 with cloud enablement - Moving towards a cloud oriented service delivery platform

3 simple steps to cloud enablement…

1. Define your platform encapsulating your existing regions
2. Define your applications, entry points, and dependencies from existing assets
3. Deploy your applications onto your platform

With cloud enablement you can…

- Bring the flexibility of cloud deployment to your existing CICS assets
- Easily measure resource usage of your CICS business applications
- Dynamically control your CICS applications and infrastructure at runtime

Application

Create agile services from existing assets

Platform
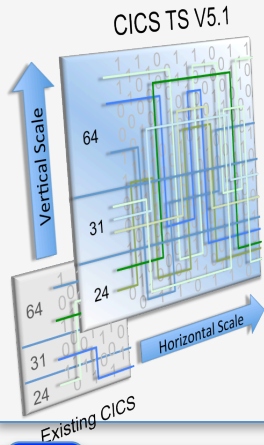
Create agile service delivery platforms

Policy

Control critical resource thresholds with policies

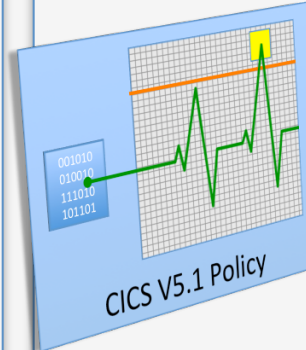# CICS Tools V5.1 - Driving Operational Efficiency

Greater Capacity

- Use CICS IA and CICS PA to determine the threadsafe readiness of programs, plan region consolidation etc
- zIIP-eligible CICS IA stored procedures and zAAP-eligible CICS DA server can save MLC $s

Managed Operations

- CICS CM supports all new resource definitions in both CSDs and BAS for TSV5.1 and below
- Improved CICS IA and CICS PA data management reduces space needs and simplifies tasks
- CICS PA provides Application and Platform SLA analysis and resource usage reports
- CICS DA automated cloning and CICSPlex SM provisioning wizards automate and standardize
- CICS CM Packaging view avoids UI-switching

Increased Availability

- CICS VR adds replication logging support for Active-Standby and Active-Query configurations
- Use CICS IA to minimize the impact of routine application maintenance for the end user

Deeper Insight

- Enriched discovery in CICS DA and CICS IA enables broader and deeper insight
- CICS PA processes SMF performance and statistics data providing reports for all new metrics in CICS TS V5.1
- CICS PA *Wait analysis* helps resolve performance problems
- CICS DA model can be exported for external analysis and reporting
- CICS CM deployment analysis reports avoid potentially costly surprises

# CICS Tools V5.1 - Increasing Service Agility

First-class Applications

- CICS CM helps manage new Application definitions

- New CICS PA views simplify Application performance analysis and

- CICS IA tracks, analyzes, and helps create CICS TS Applications
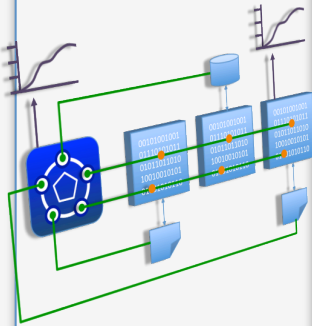
First-class Platforms

- CICS CM helps manage new Platform definitions

- CICS DA automates creation of new CICS platforms

- Discover and manage your CICS topology and applications with CICS DA and CICS CM

- Analyze Applications and isolate Platform performance bottlenecks with CICS PA
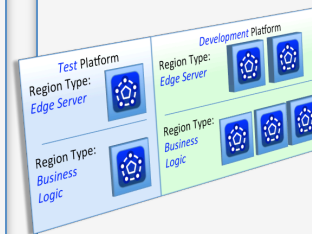
Modern Interfaces

- CICS DA active graphical visualization the CICS topology - tags and filters enable custom views

- Visualization and charts are now available for the metrics introduced in TS V5.1

- Customizable sheet views in CICS PA allow customers to see data *their way*

Foundational Enhancements

- New CICS DA server delivers faster discovery and better governance

- 64 bit enablement

- CICS DA IPv6 and virtual IP addressing support extends usage to modern networks

- CICS IA Global Work Area above the 31 bit line

IBM
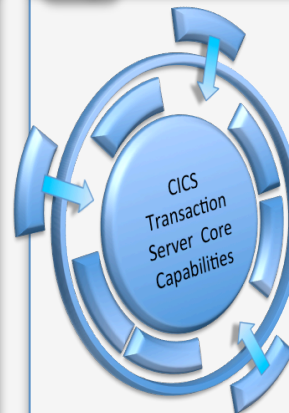
CICS Transaction Gateway V9.0 - *Open integration and modernization*

What's new in CICS Transaction Gateway V9.0…

- Java 7 support for client applications

- Increased vertical scaling on z/OS

- SSL connectivity for 3-tier topologies

- Connection-level time-out with IPIC

- 64-bit support for ECI V2 and ESI V2

- ECI V2 support for asynchronous calls.

- End-to-end transaction tracking

- Simplified DSS configuration

- Statistics recording with CICS TG for MP

CICS Transaction Gateway provides…

- Proven connectivity—distributed platforms integrate with any CICS server

- Skills match for today—bridges the skill gap

- Secure, scalable, and highly available connectivity