CICS Transaction Server

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The world as we know it doesn't exist without Systems of Record

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Mobile: driving back-end transactions to system of record

10 billion+
devices accessing information

150 interactions per day per device
typical mobile devices switched on 100% of time

91% of new customer facing apps
CIOs report that are accessing the mainframe

46 percent
banks said mobile application development is central to overall digital strategy

32% more profitable

19% higher revenues
mobile banking customers

53% less attrition

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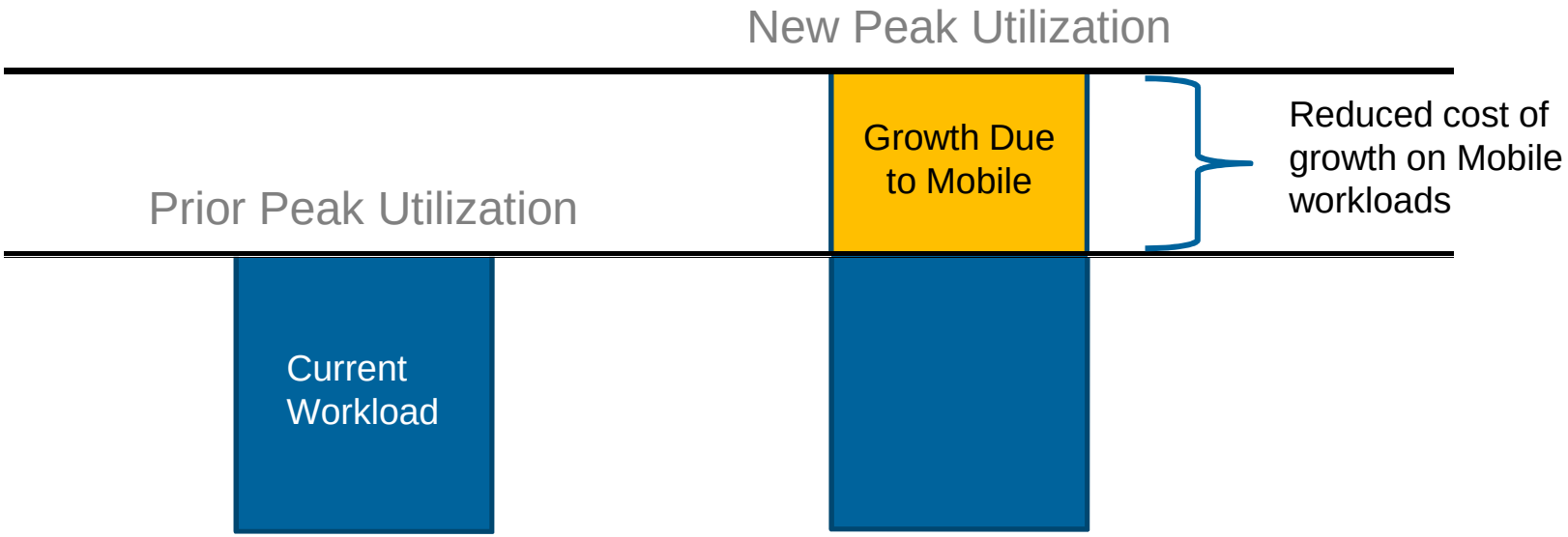
New System z mobile pricing

- **Scale** IT Investments with the growth & business returns of mobile
- **Leverage** existing System z data and transaction processing for mobile



- *No Infrastructure Changes Required…*
- *Applicable to workloads running on zEC12 and zBC12 …*
- ***Up to a 60% reduction** in reported CPU utilization for Mobile transactions*

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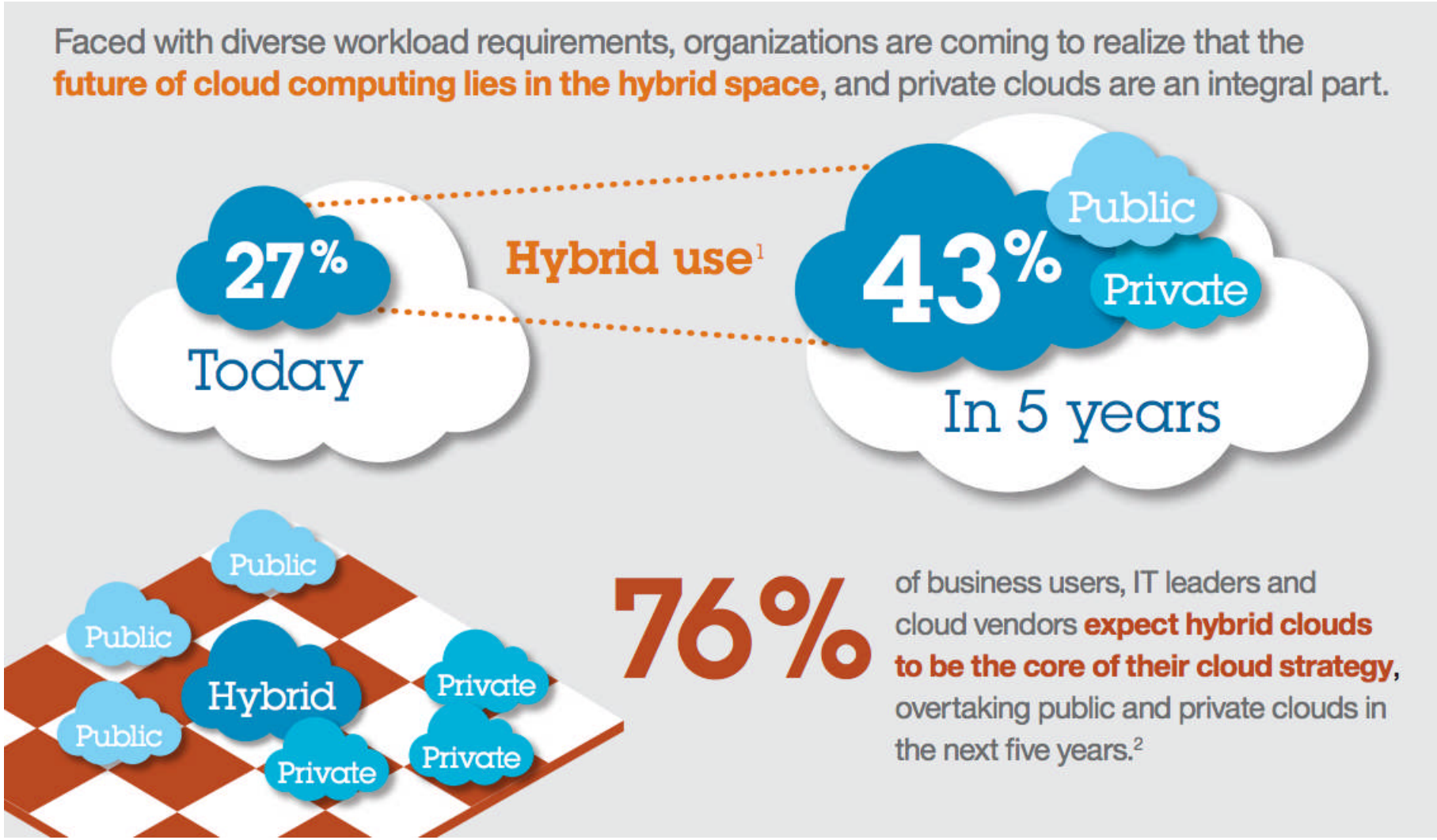
4

Cloud technology is driving change – cloud integration becomes key



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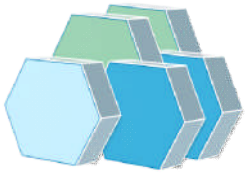
Cloud platforms & integration

Instant services, runtimes, and infrastructure for cloud based applications.

Integration with existing Systems of Engagement



Clients using TXSeries who need to balance costs against growth.

TXSeries on Softlayer for cloud-style scalability

Simplified system management and rapid application deployment.

On premise pattern based cloud deployment.

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z/OS Connect: Systems of Engagement to Systems of Record

Discover/Reuse services

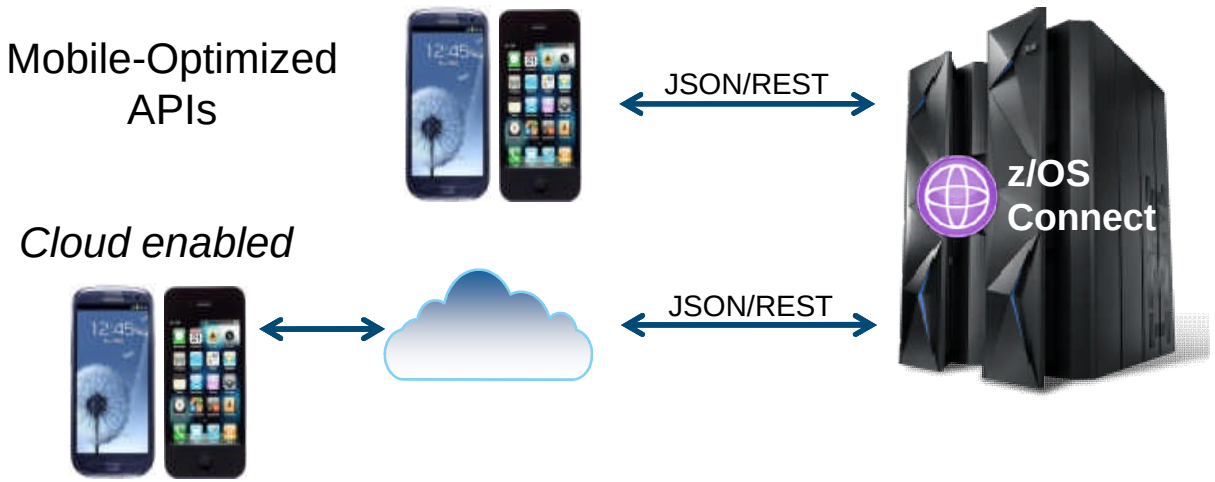
Enhance customer experience by exposing mainframe services

Simplify connection

Standard open API technology for securely connecting mobile and cloud applications to System z

Audit and chargeback

Integration with mainframe accounting to determine usage & traffic patterns



Integrates with standard z/OS middleware

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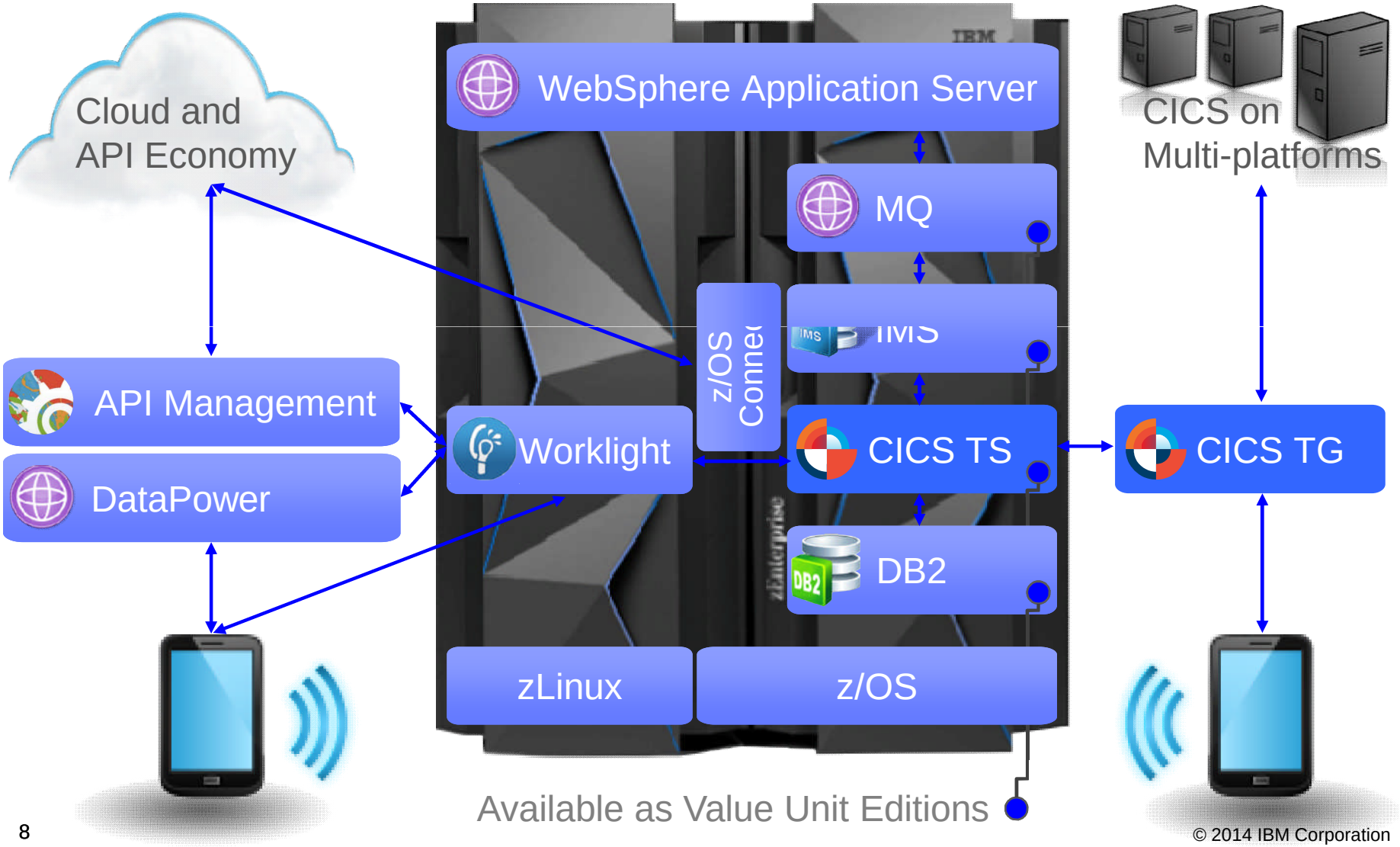
Systems of Engagement Meet Systems of Record



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CICS TS V5 Vision

Service Agility

Runtime support for production ready web applications.

Integration with mobile applications.

Operational Efficiency

Increased system capacity and capability to achieve more with less.

Automatic control of critical resources using policies.

Cloud Enablement

Simplified system management and rapid application deployment.

On premise pattern based cloud deployment.

+ Continuous enhancements to the solid foundation

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Purpose

IBM CICS Transaction Server V5

is the premier enterprise grade mixed language application server

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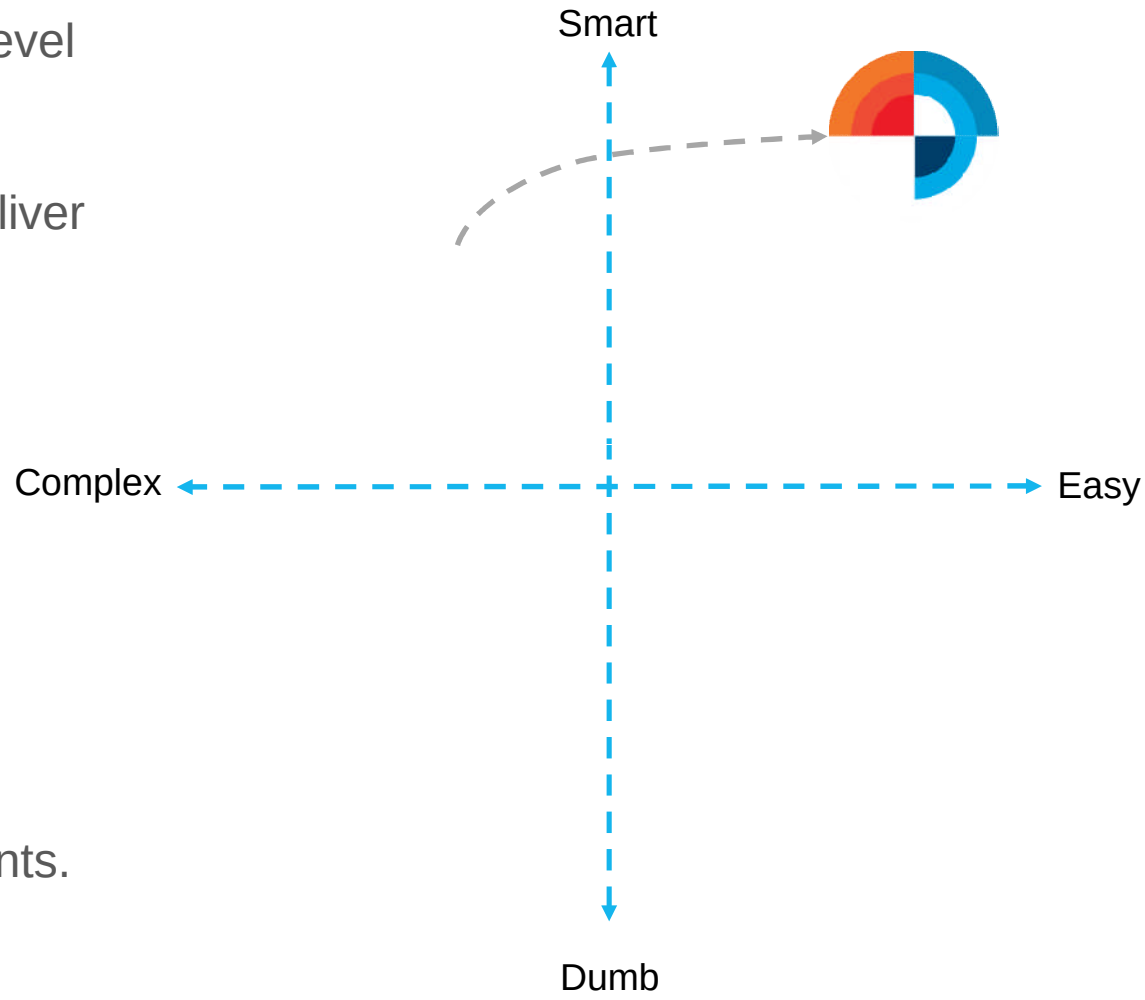
CICS Vision

As CICS has got smarter, the level of complexity has increased.

CICS TS V5 will continue to deliver more advanced capabilities.

At the same time, CICS will simplify common tasks, and provide automatic features to better manage your environments.



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CICS Transaction Server V5.1

Service Agility

A production-ready web container, built on IBM WebSphere Application Server Liberty Profile, for the deployment of lightweight Java servlets and Java Server Pages (JSPs).

Operational Efficiency

Greater capacity is delivered through significant vertical and horizontal scalability enhancements. Fewer regions can now run the same workload.

Cloud Enablement

First-class applications enable the creation of agile services from existing assets. First-class platforms enable applications to be rapidly promoted from development and test environments into production.

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CICS Transaction Server V5.2

Service Agility. Operational Efficiency. Cloud Enablement

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CICS Transaction Server V5.2

1. Integrates mobile capabilities and broadens the web programming model, ***without requiring additional middleware***

2. Support distributed security standards and automatically safeguard critical runtime resources, ***without requiring additional system code***

3. Deploy and manage several versions of a multi-program application and run them concurrently, ***without requiring additional regions***

* Various work on the Technical Foundation

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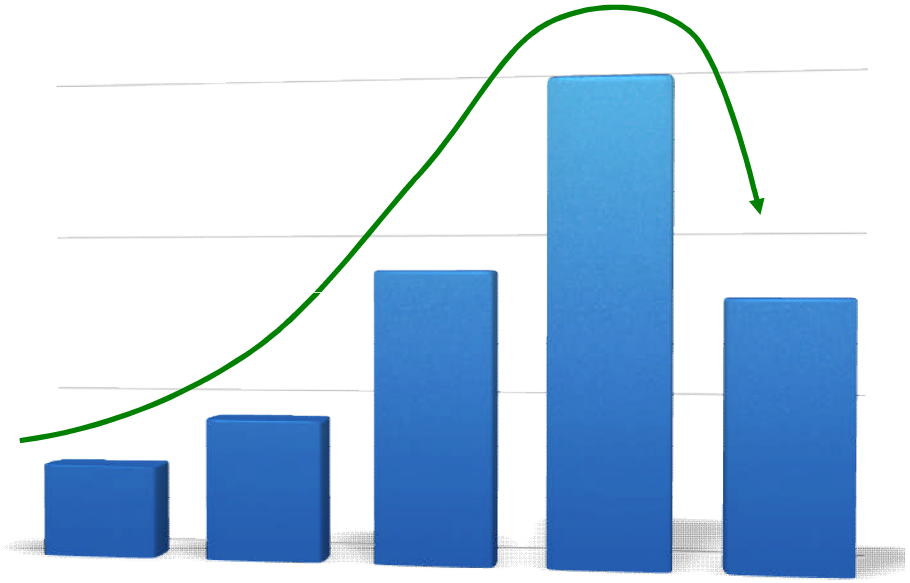
Service Agility

1

Integrates mobile capabilities and broadens the web programming model, ***without requiring additional middleware***



Number of systems

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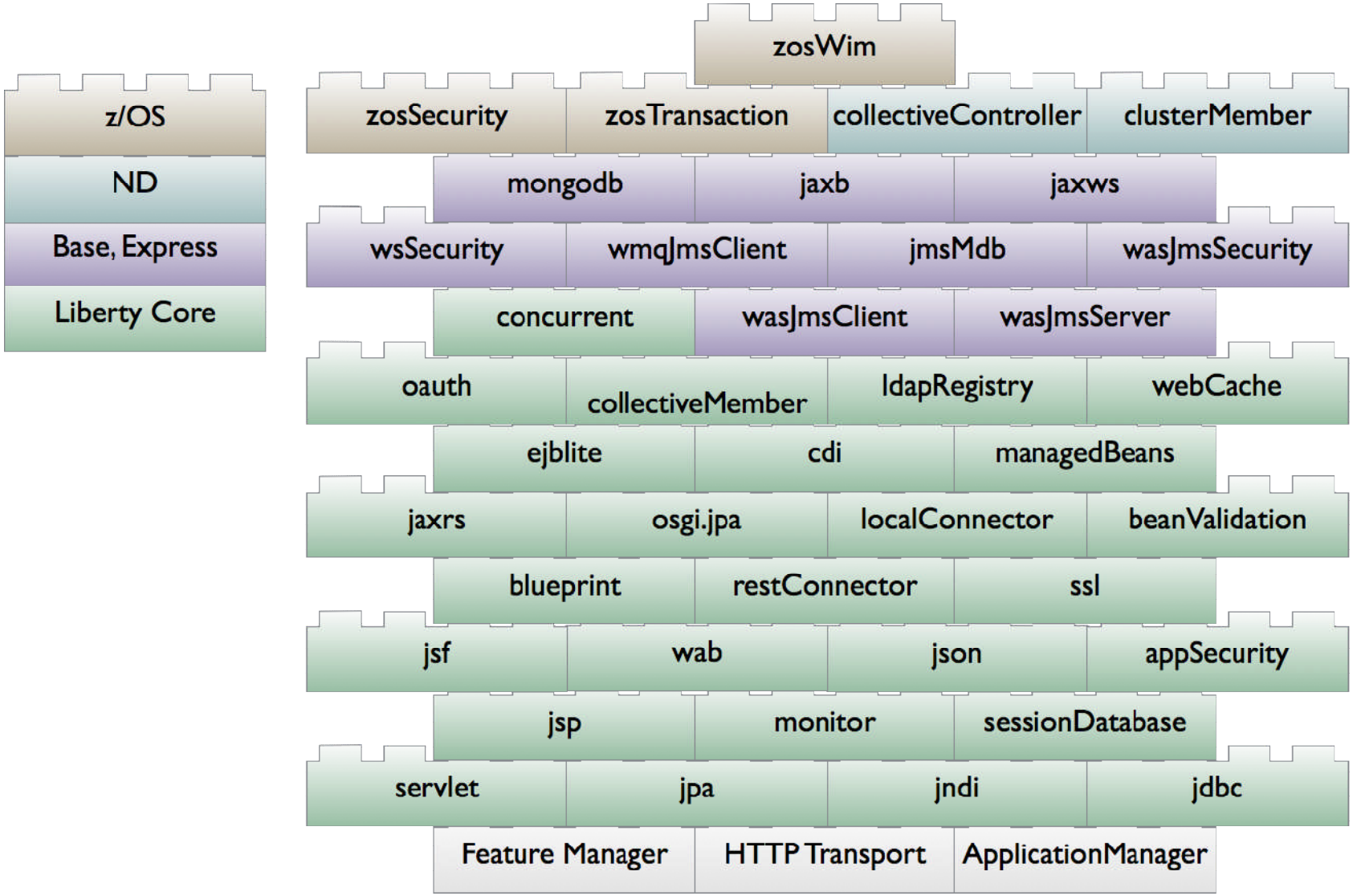
WebSphere Application Server Liberty Profile



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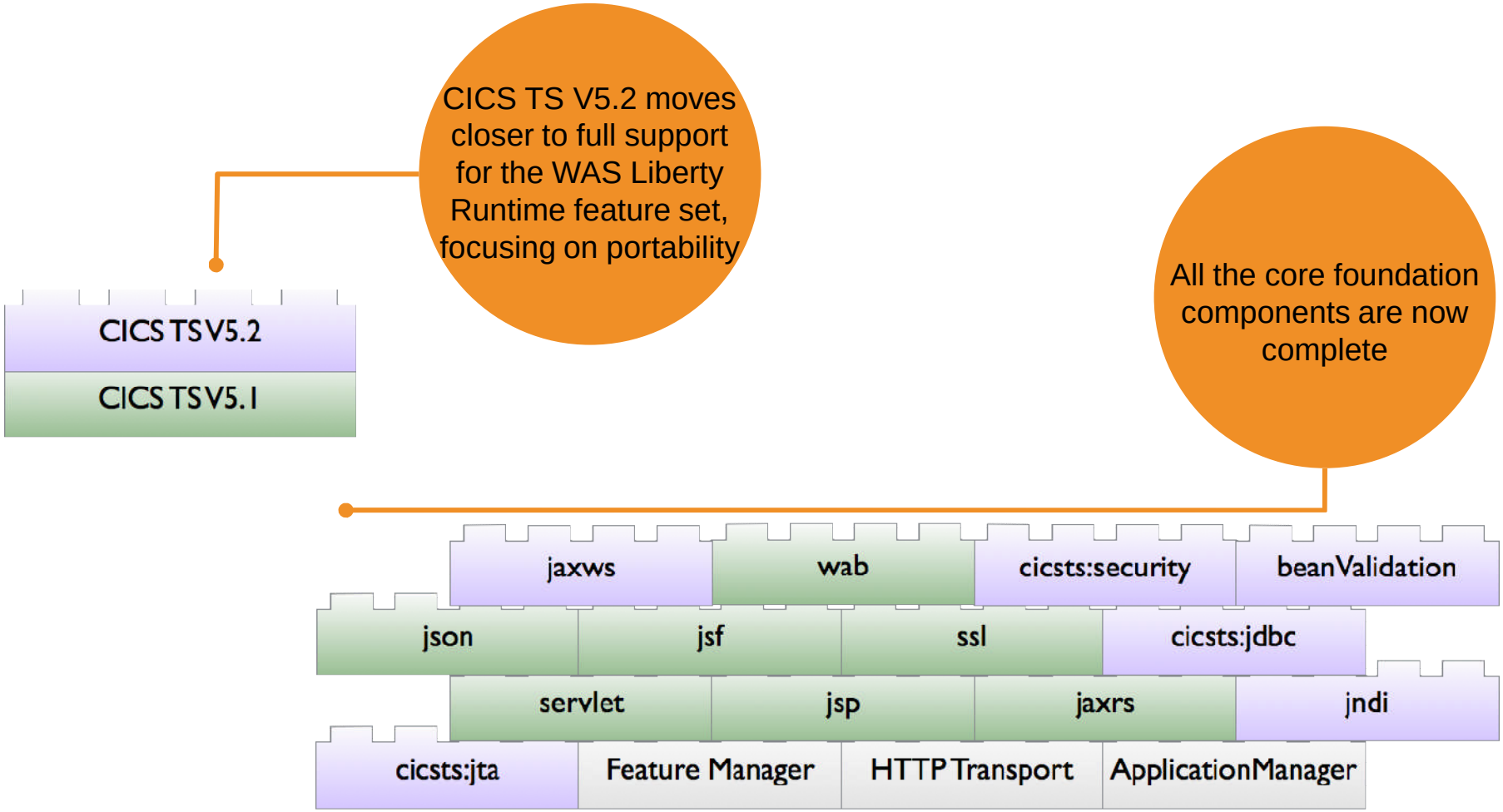
WebSphere Application Server Liberty Profile within CICS TS V5.2



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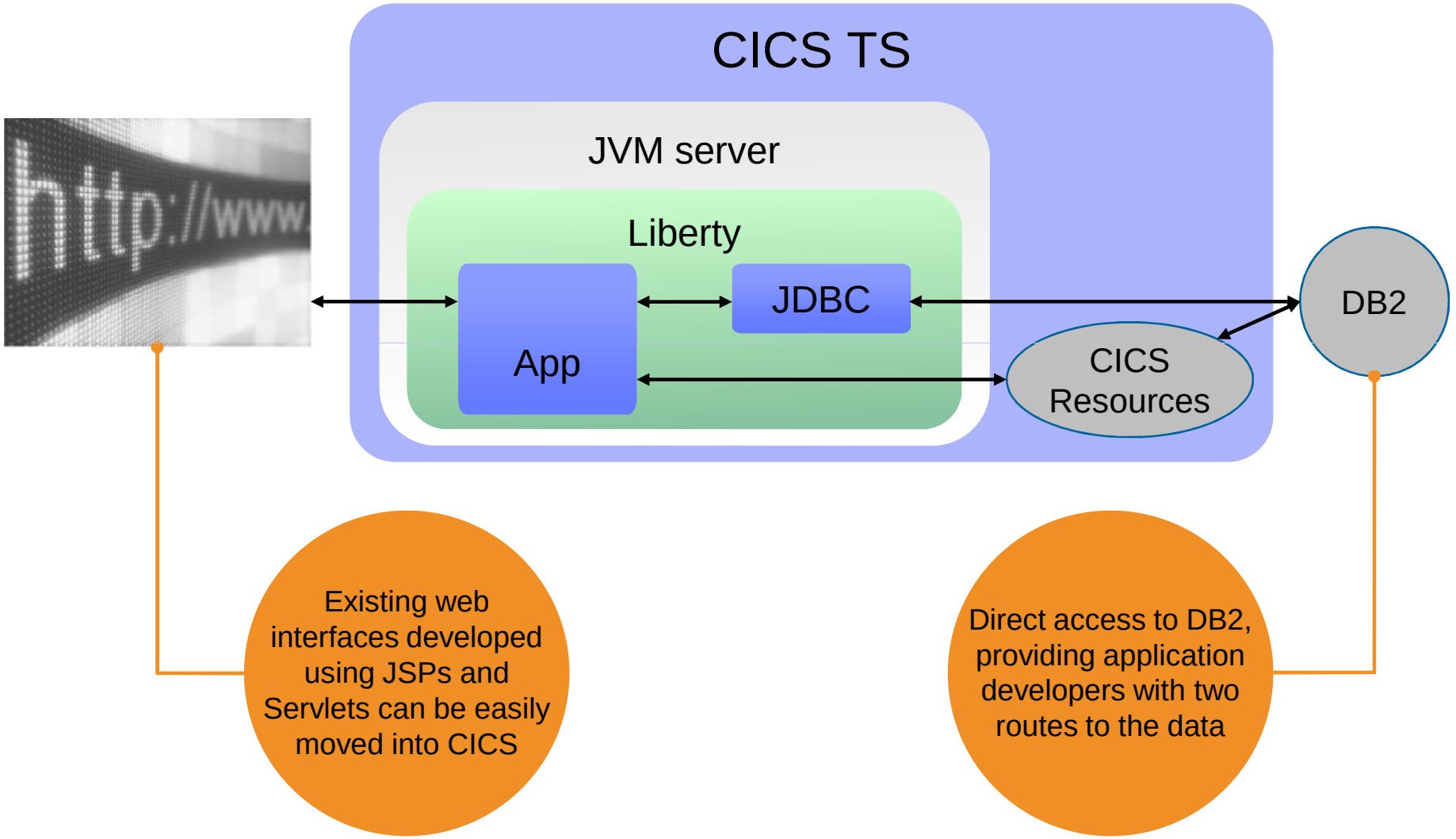
Liberty Web Apps in CICS TS V5.2



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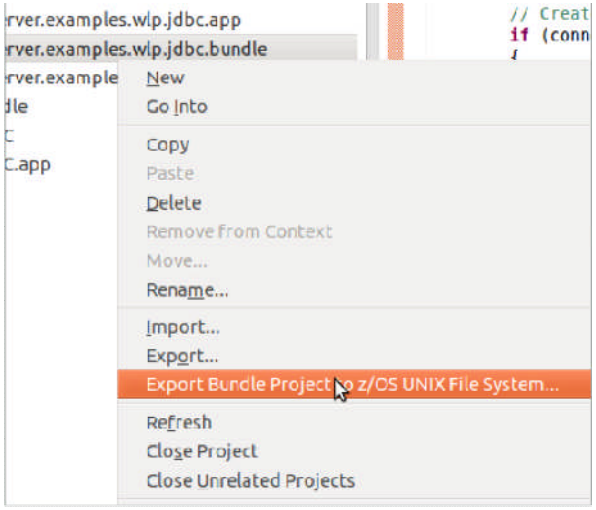
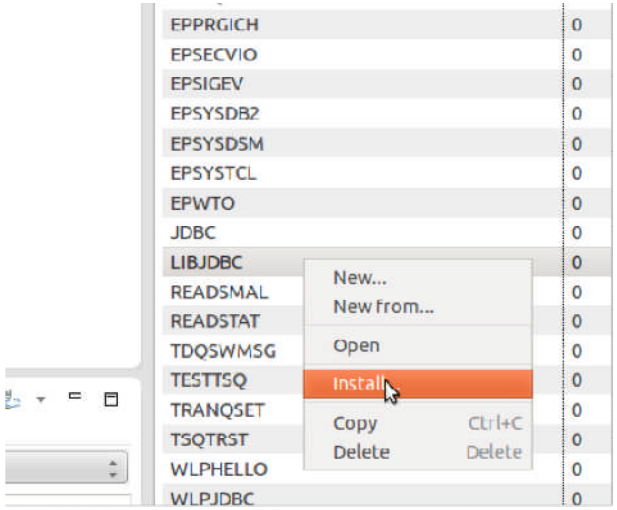
Liberty scenario

Move JSP or Servlet presentation code into CICS Transaction Server





A

Step 1

Modify application data logic to make JCICS API calls or direct JDBC calls, if required

B

Step 2

Package application into a EBA for deployment into CICS Liberty

C

Step 3

Install CICS application into CICS Liberty Server and enable using the CICS Explorer

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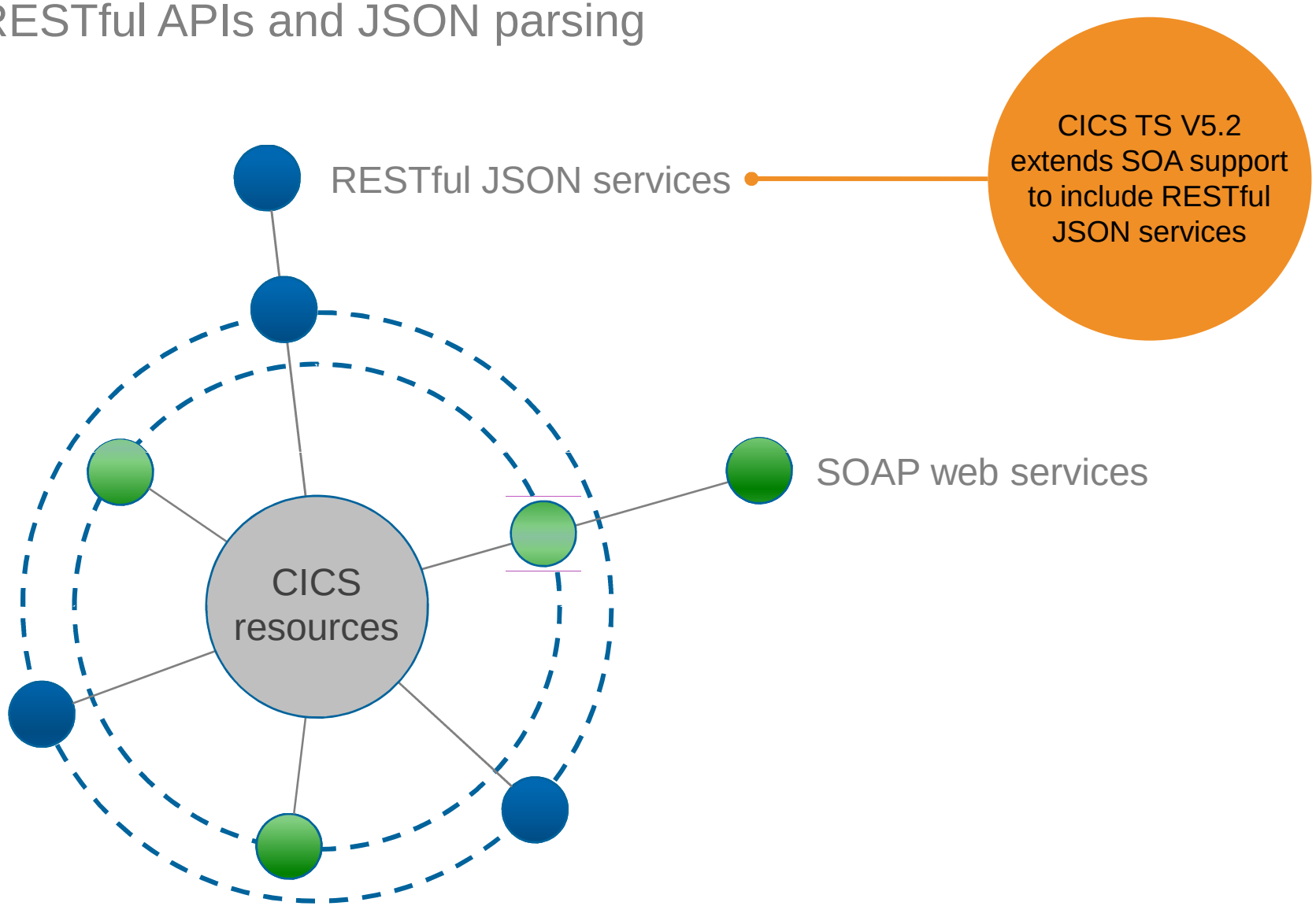
RESTful APIs and JSON parsing



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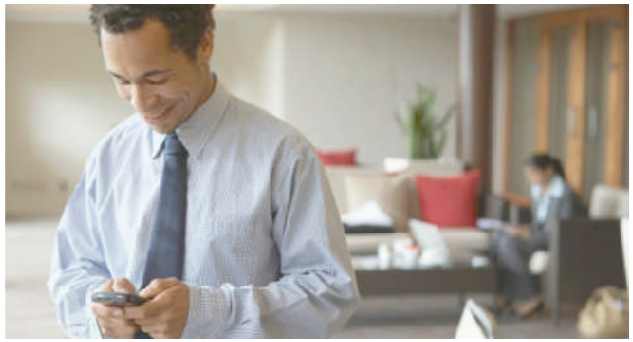
Mobile scenario

Connect directly to CICS from Worklight using end-to-end JSON

```
function getCustomerDetails(custNum) {
    var pathURL = "GENAPP/getCustomerDetails";
    var request=
        {
            "LGICUS01Operation":{
                "ca" : {
                    "ca_request_id" : "01ICUS",
                    "ca_return_code" : "00",
                    "ca_customer_num" : custNum,
                    "ca_num_policies" : ""
                    }
            }
        };
```



A

Step 1

DFHLS2JS to generate the JSON artefacts for the target CICS service.

B

Step 2

Mobile developer uses JSON schema to build a Worklight adapter.

C

Step 3

Frontend mobile developer calls the Worklight adapter which calls the service hosted in CICS.

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Operational Efficiency

2

Support distributed security standards and automatically safeguard critical runtime resources, ***without requiring additional system code***

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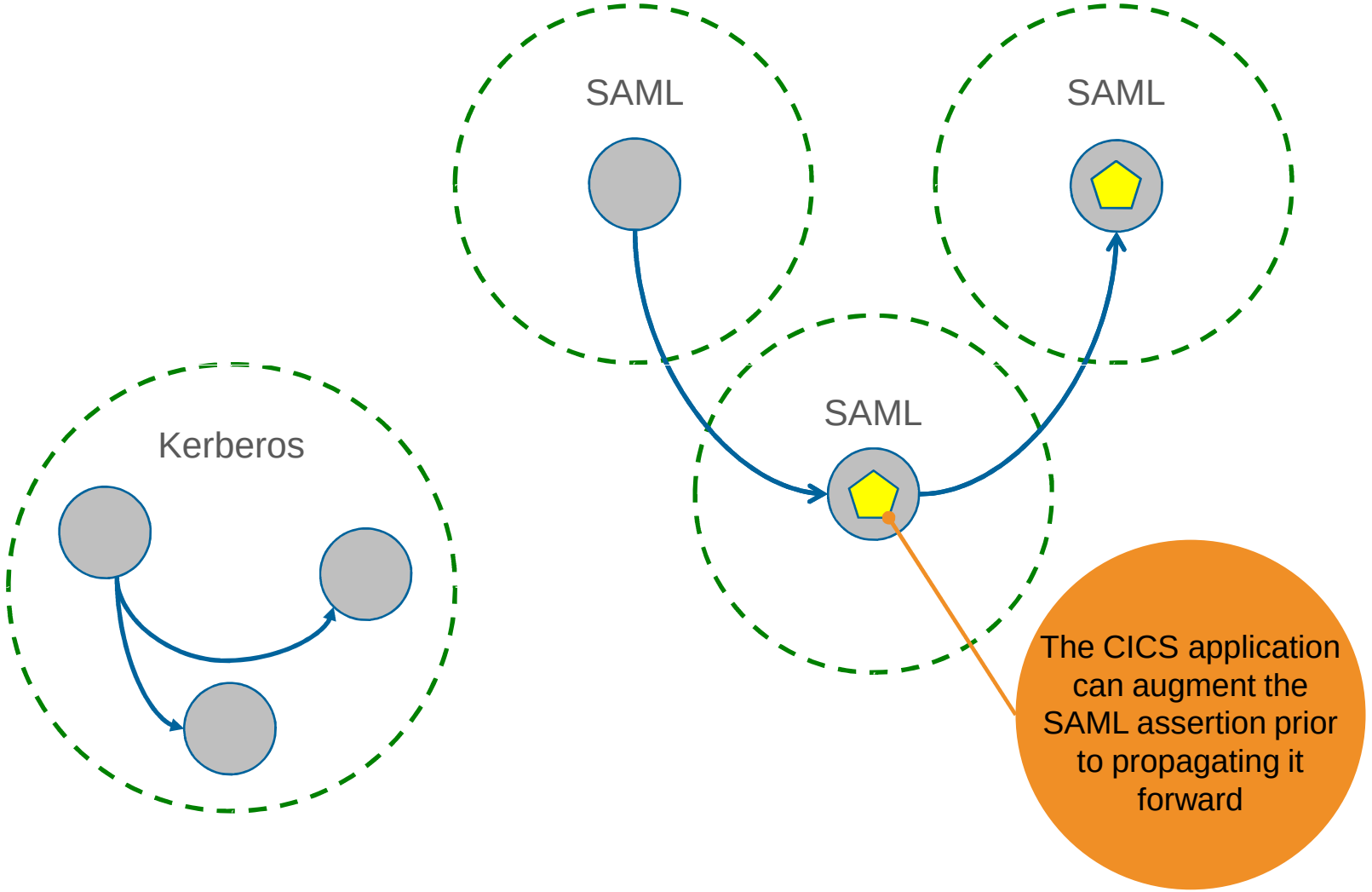
SAML and Kerberos security



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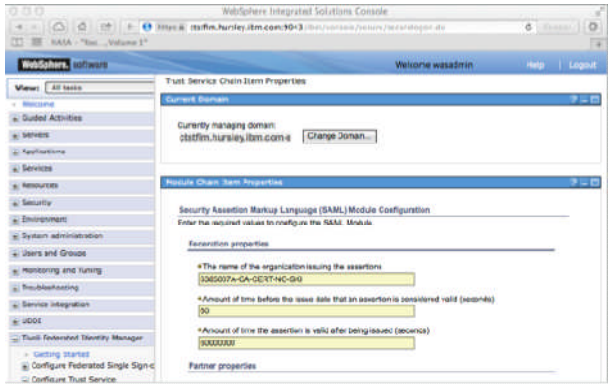
SAML Security scenario

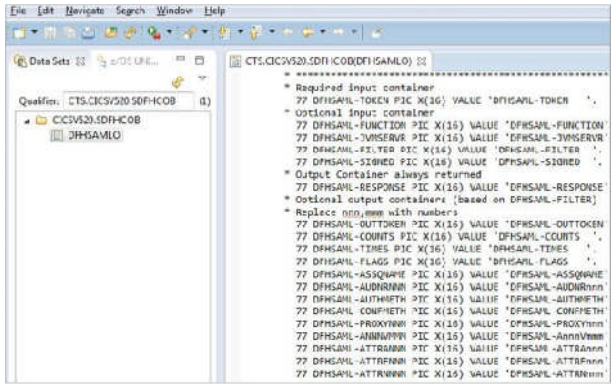
A CICS application developer writes a COBOL program with behavior that's dependent on the SAML security token



A

Step 1

Client requests SAML assertion from Tivoli Federated Identity Manager or Datapower



B

Step 2

CICS COBOL application extracts SAML containers from DFHSAML channel

C

Step 3

The application can add additional attributes to the assertion for downstream components

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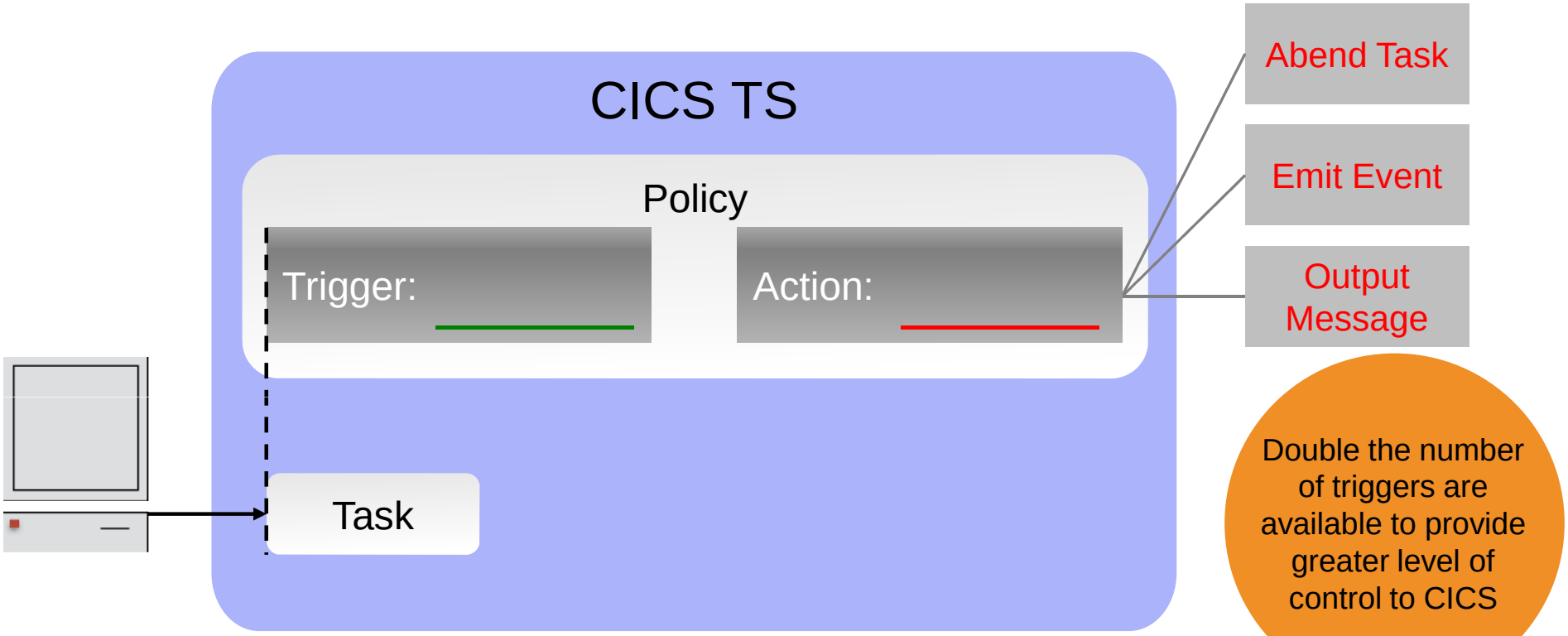
Double the number of policy triggers



New V5.2 Triggers	Cumulative Time	Syncpoint	Start	TSQ	TDQ
CICS V5.1	DB2 SQL	Files	Storage	CPU Time	Prog. Link

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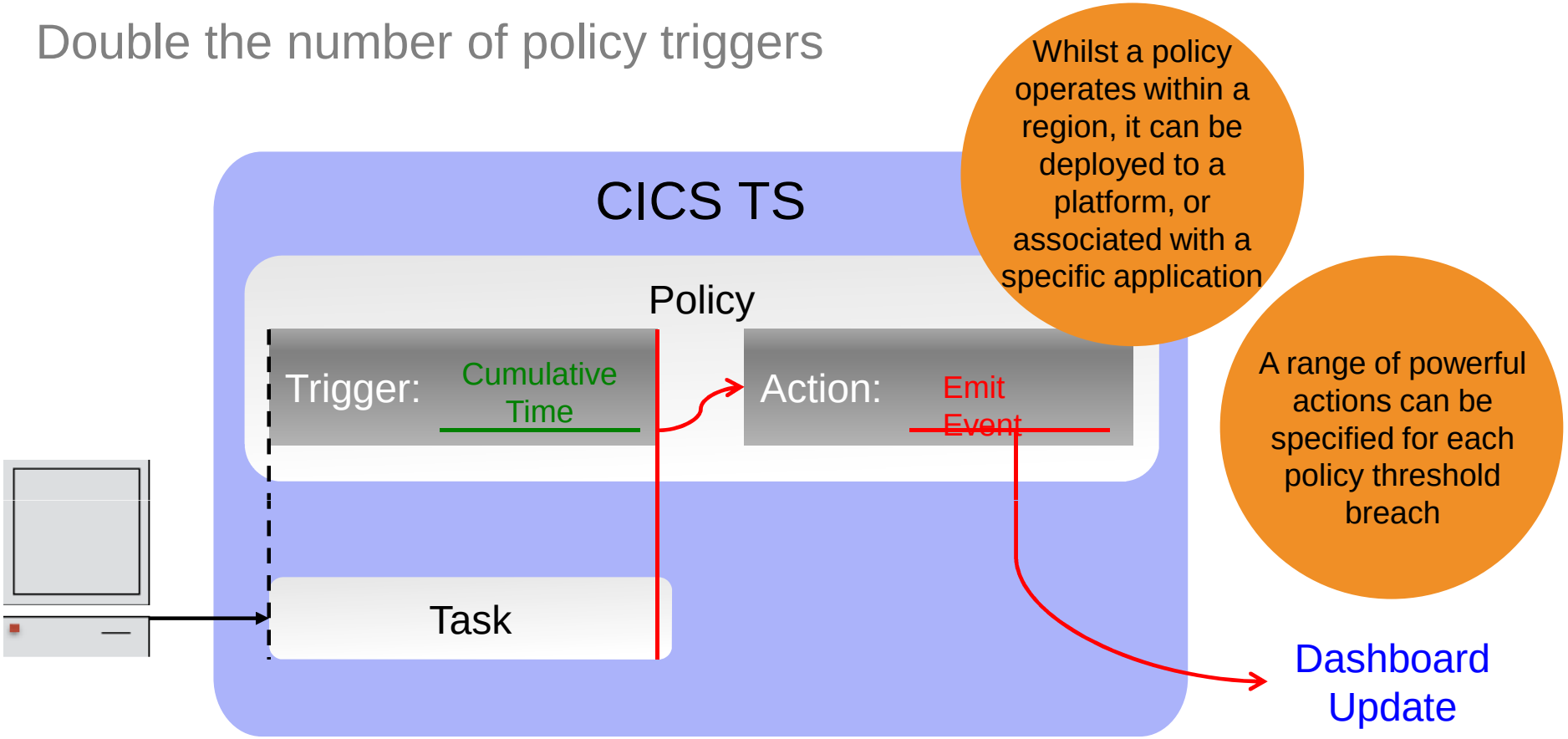
Double the number of policy triggers



New V5.2 Triggers	Cumulative Time	Syncpoint	Start	TSQ	TDQ
CICS V5.1	DB2 SQL	Files	Storage	CPU Time	Prog. Link

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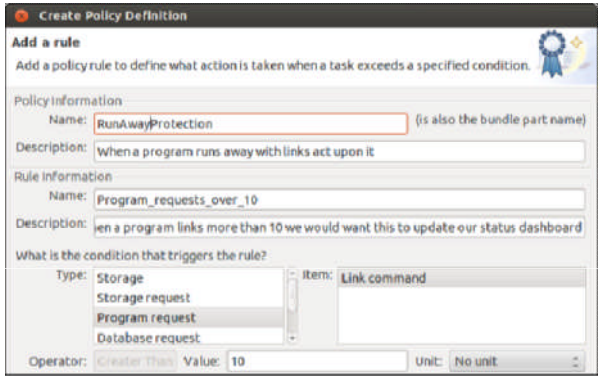
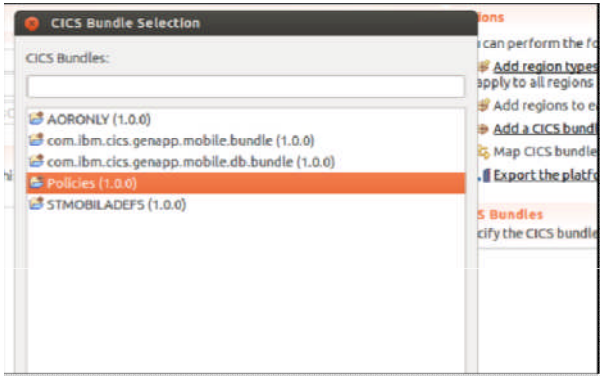
Policy scenario

Define a policy to trigger an event when an application consumes too much total elapsed CPU time





A

Step 1

Define the policy thresholds and trigger action that CICS should take

B

Step 2

Associate the policy with the appropriate platform or application and deploy

C

Step 3

When the threshold is breached, CICS triggers an event, updating an operations dashboard

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Cloud Enablement

3

Deploy and manage several versions of a multi-program application and run them concurrently, ***without requiring additional regions***

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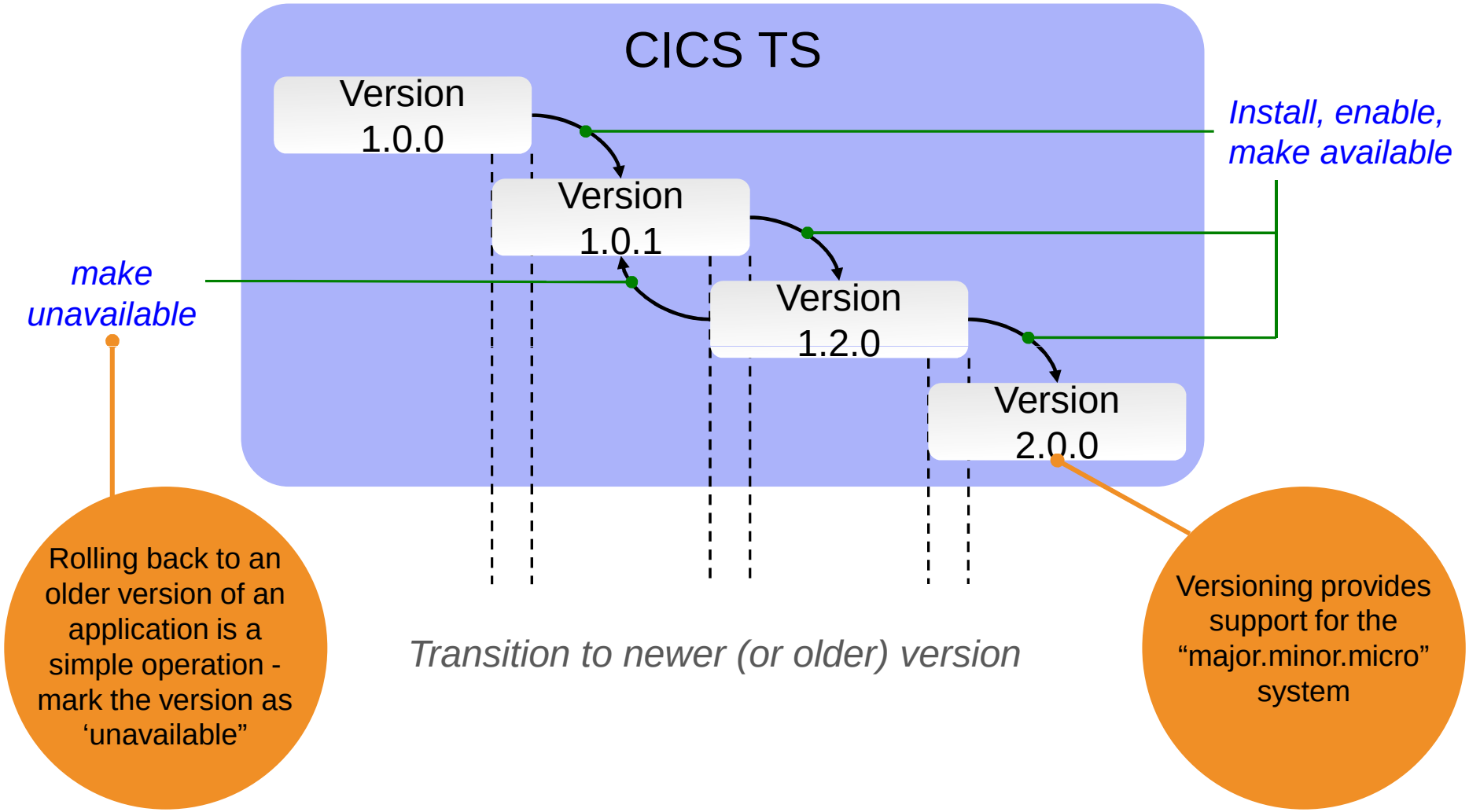
Multi-versioning



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Multi-versioning

Application packaging helps you consolidate onto fewer regions by providing private program definitions

CICS TS

Private programs

PROG1

URIMAP

Payroll App

LIBRARY

URIMAP

Customer App

LIBRARY

PROG1

Private programs

X

Y

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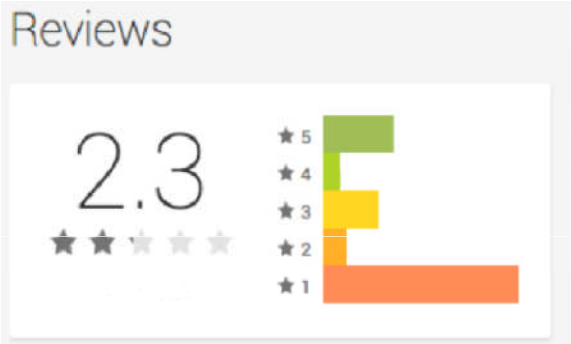
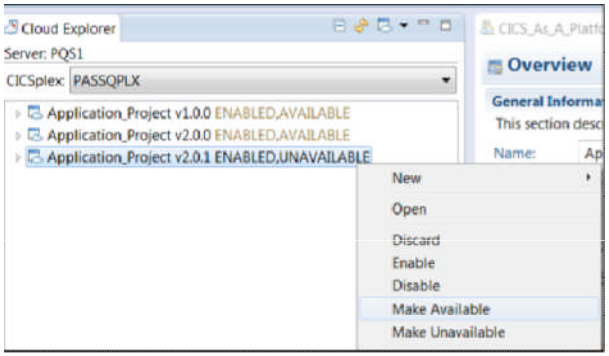
Multi-versioning scenario

A bug has been found and an urgent fix is required immediately





A

Step 1

After fixing the bug in the code, repackage it with a new micro version number

B

Step 2

Once installed, switching to a new version of the application is simply a case of making it “available”

C

Step 3

CICS takes care of moving clients to the new version of the application across all regions within a platform

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* Various work on the Technical Foundation

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Generation z

No sales pitches, no marketing, just drinks with other Generation z's

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19:30 Wednesday April 30
Public House, The Venetian

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Get the lowdown on what's going on

Join us:
System z
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Build a community of like-minded people

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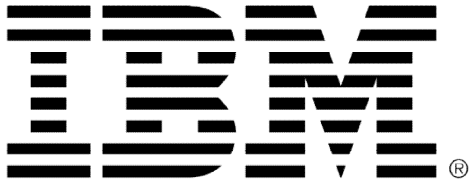

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