2012
IBM System z Technical University

Enabling the infrastructure for smarter computing

CICS TS : Platform Management Update

zAI12

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CICS meets the cloud
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CICS Cloud Enablement

Monday

0830 *General Session*

Tuesday

1030 CICS TS : Introduction to Applications as first class entities

1300 CICS TS: Introduction to Platforms as deployment targets

Wednesday

0900 CICS TS: Application Management Update

1030 **CICS TS: Platform Management Update**

1300 *CICS in the Cloud: Hands-On Lab*

1615 *CICS Tools Family Update*

Thursday

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Pain Points

Deploying and un-deploying applications is a high skill complex job due to the number of separate artifacts

Customers would like to see usage / charging, availability / SLA at the application level

Elastic scale is a requirement, but it needs to be managed within the constraints of the customers resources and business environment

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Getting started with cloud-style deployment

- **Stage 1: Create a platform**
- **Stage 2:** Create an application
- **Stage 3:** Add application entry points
- **Stage 4:** Add resources for the application
- **Stage 5:** Add a policy

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Platform Discovery using CICS DA

Discover topology

Simplified setup of CICSplex SM Single System Image

Create region types by managing existing standalone Regions

Use cloning to easily expand existing region types

Scale the Platform by activating and deactivating Regions

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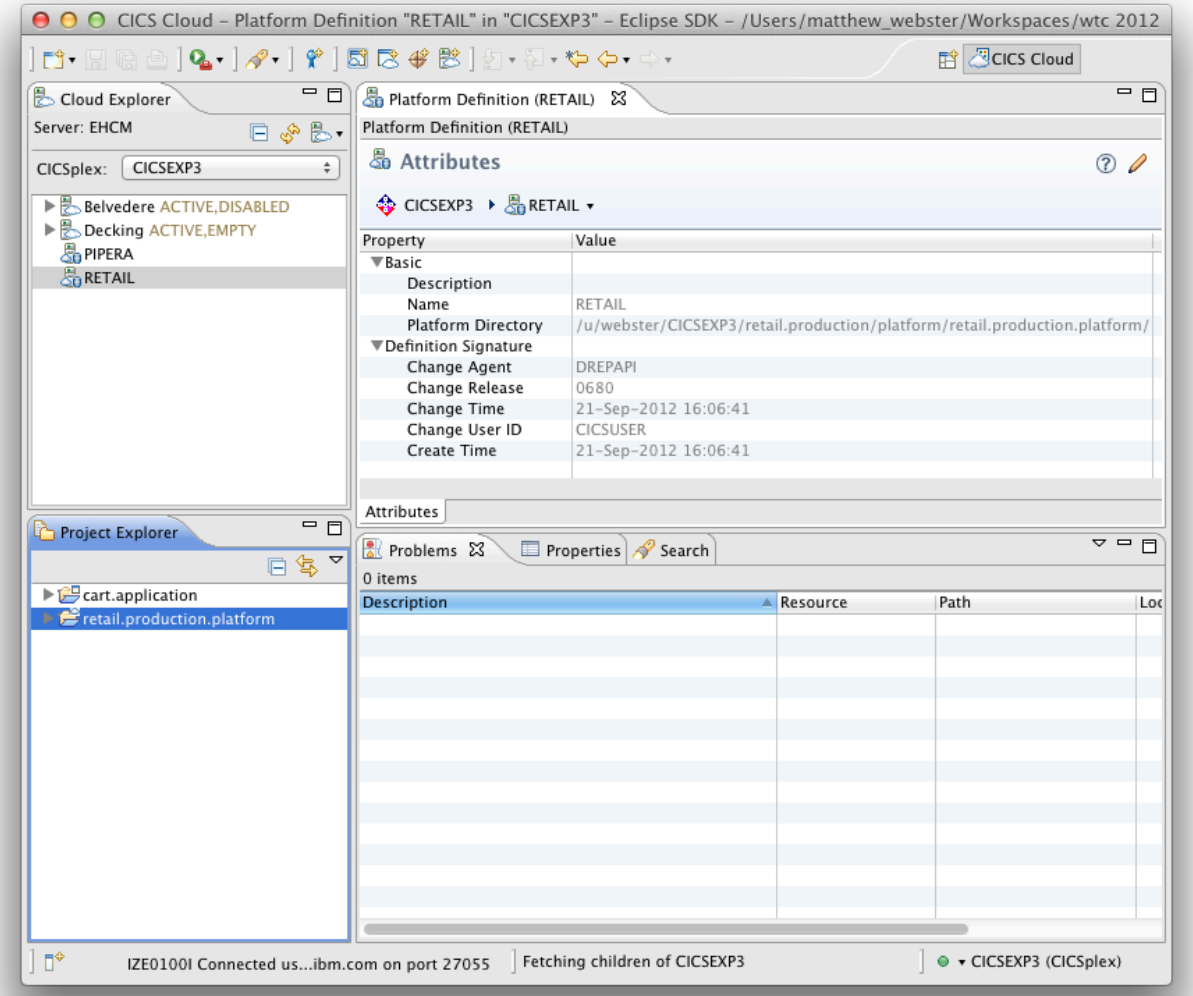
Demonstration: CICS Deployment Assistant



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Why CICSPlex System Manager?

Single System Image through CICS Explorer leveraging existing capability

Compatibility with existing resources definitions: BAS, RTA, WLM

Full autoinstall and recovery of Application and Platform resources

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Platform Autoinstall and Recovery

Platfrom recovered over CICSplex restart and all CICS bundle re-installed before any Application

CICS bundles autoinstalled when a Region started within a region type before any Application

No local catalog

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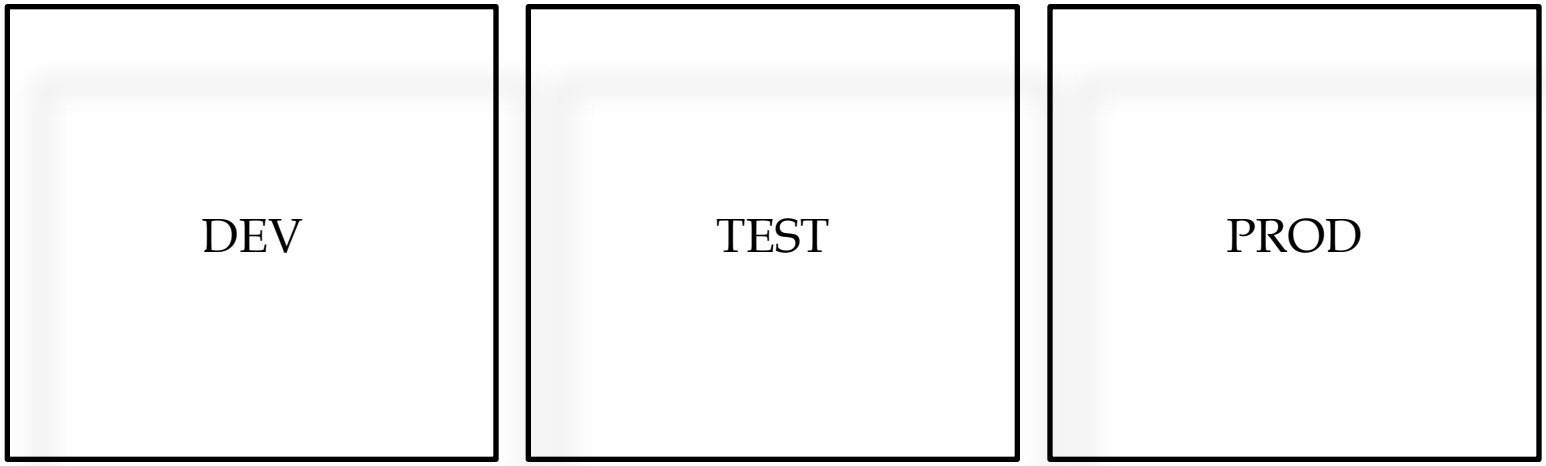
Now back to those pesky* developers



*Troublesome; annoying: *a pesky mosquito*

http://http://www.thefreedictionary.com/pesky

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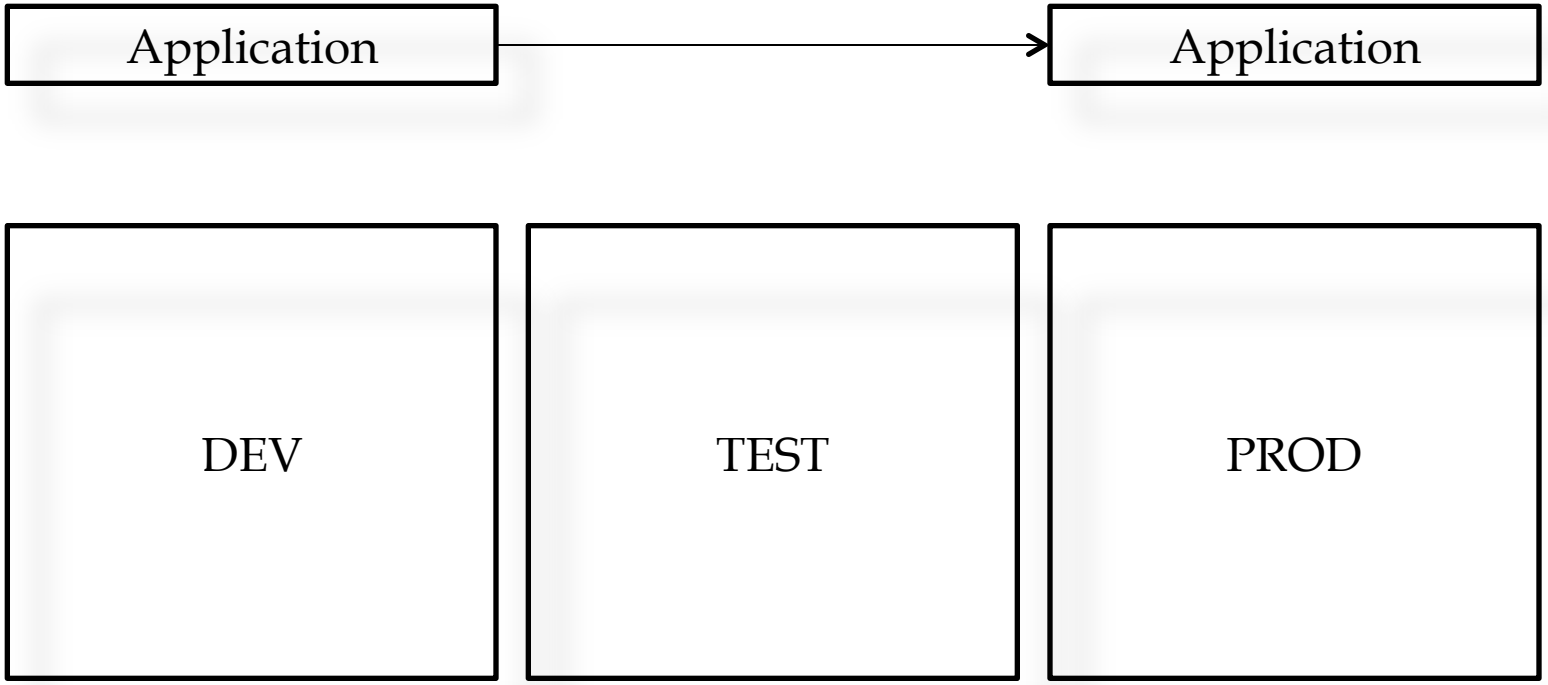
How do I move an Application from Development through Test to Production?



*Troublesome; annoying: *a pesky mosquito*

http://http://www.thefreedictionary.com/pesky

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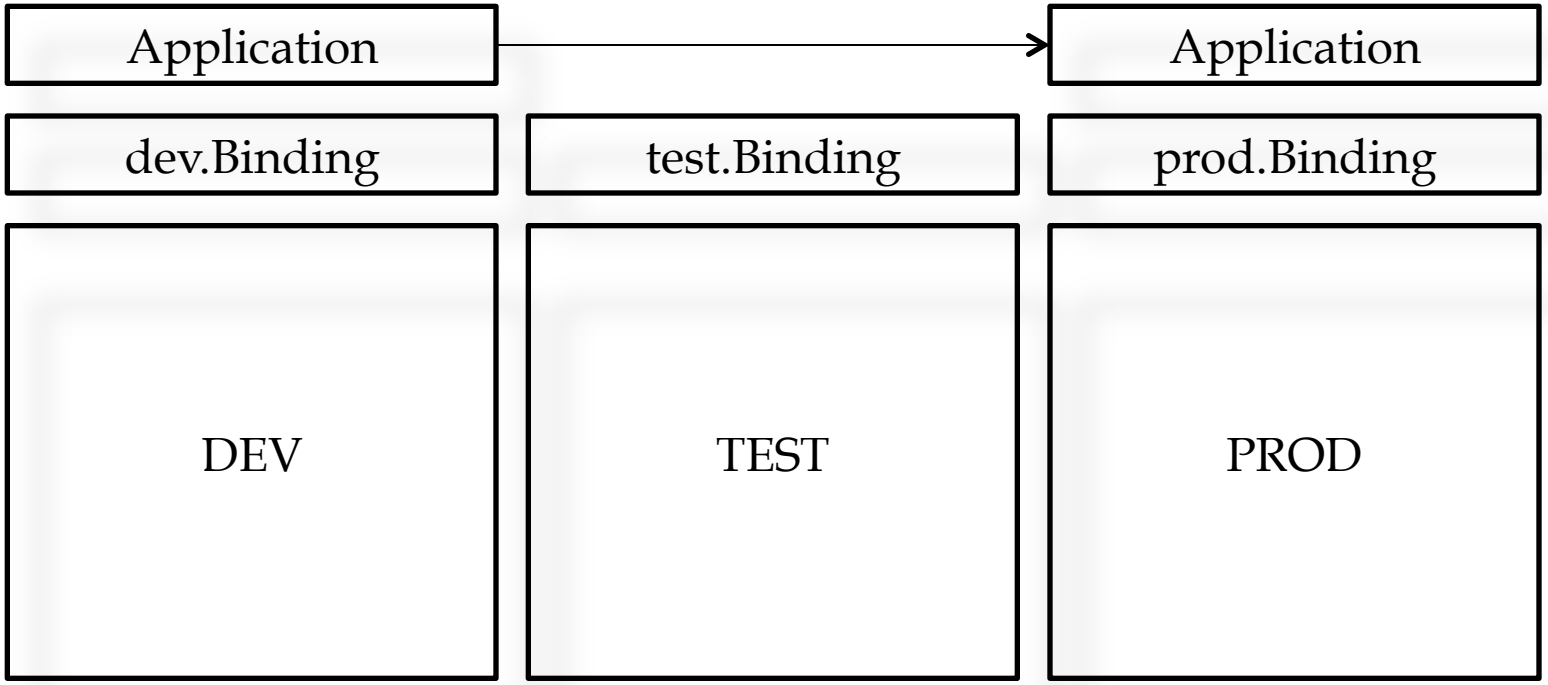
Answer: use Application Bindings



*Troublesome; annoying: *a pesky mosquito*

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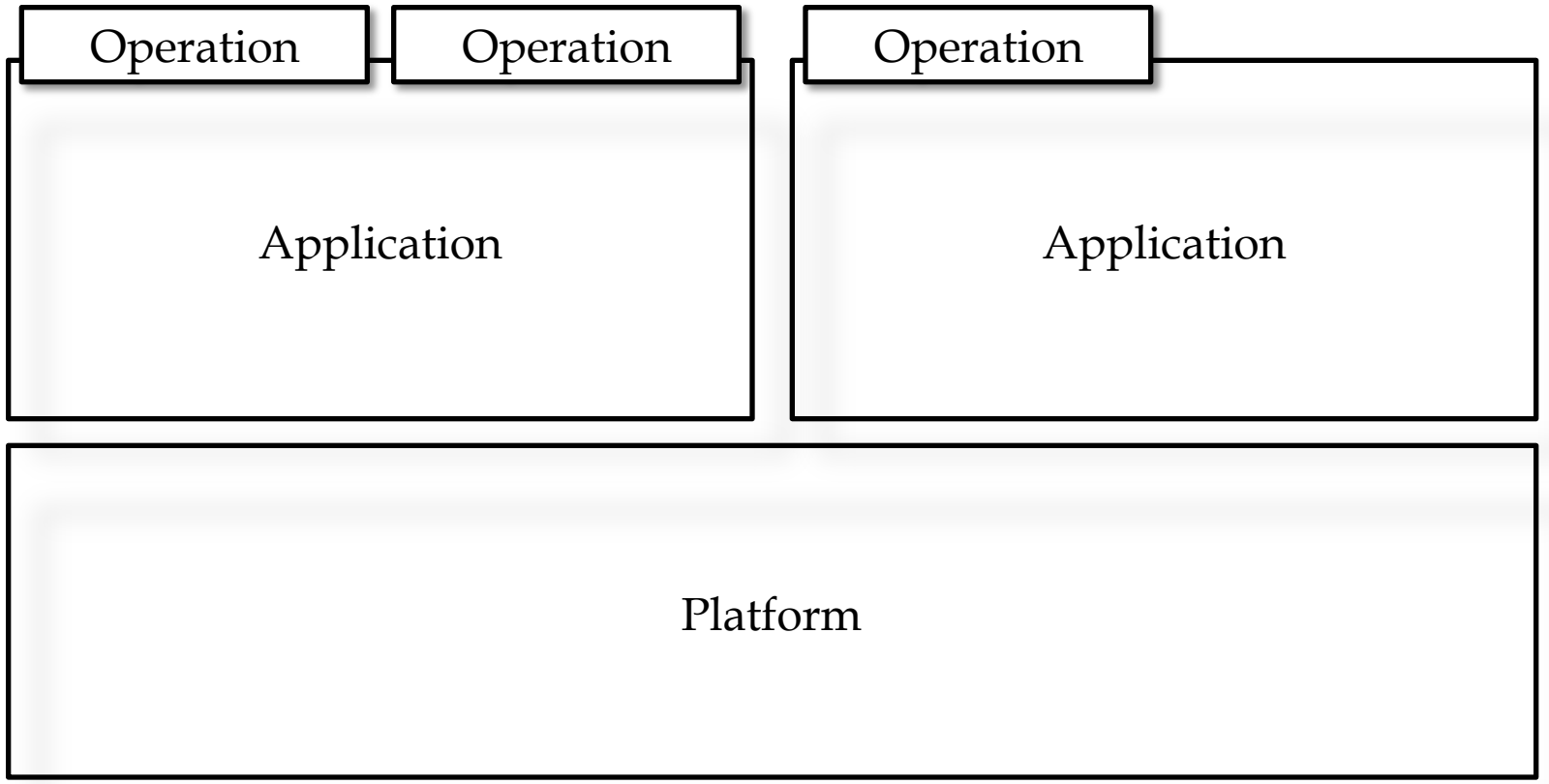
Policy Scoping: Platform, Application or Operation



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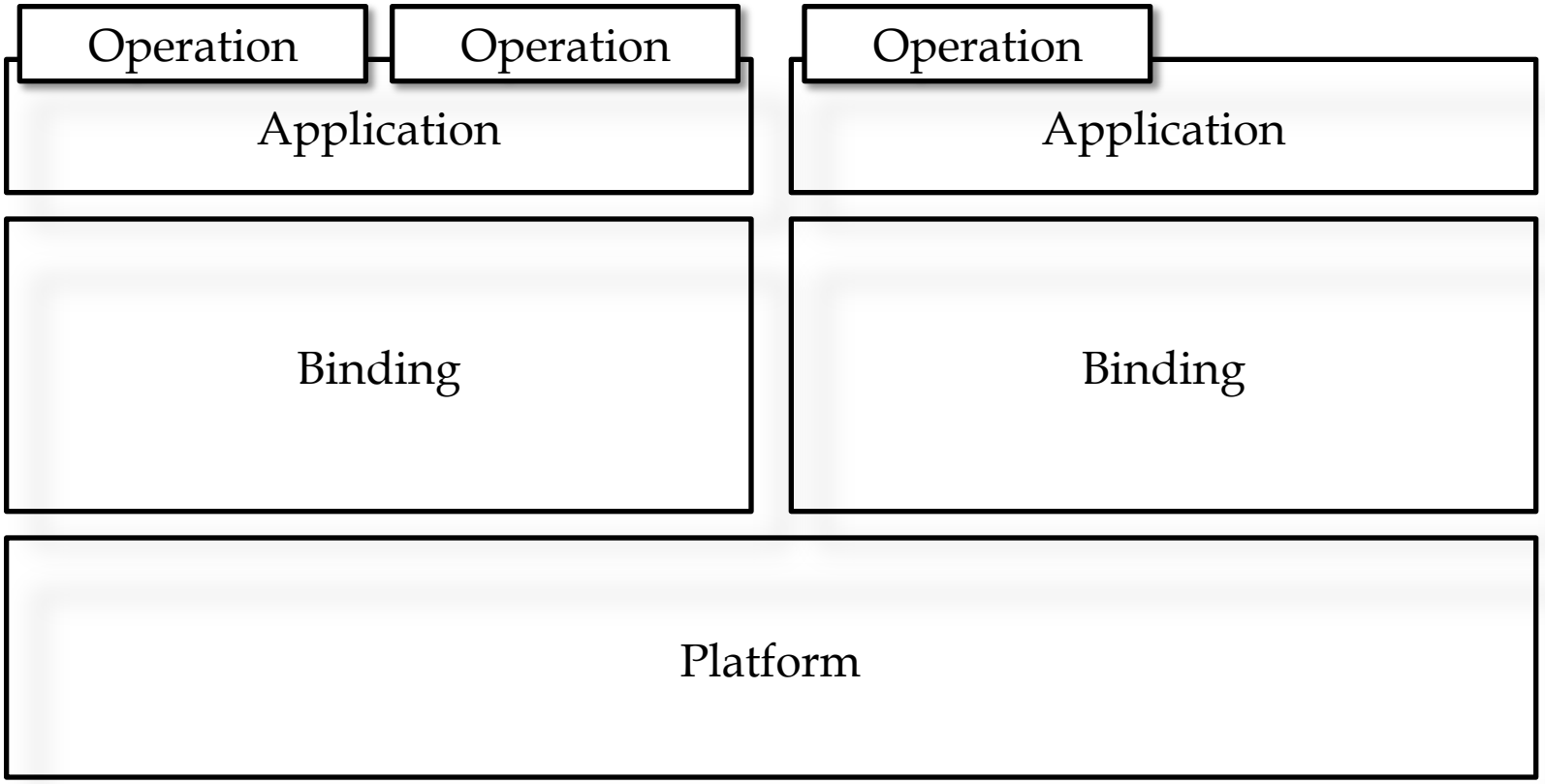
Policy Scoping: Application Binding



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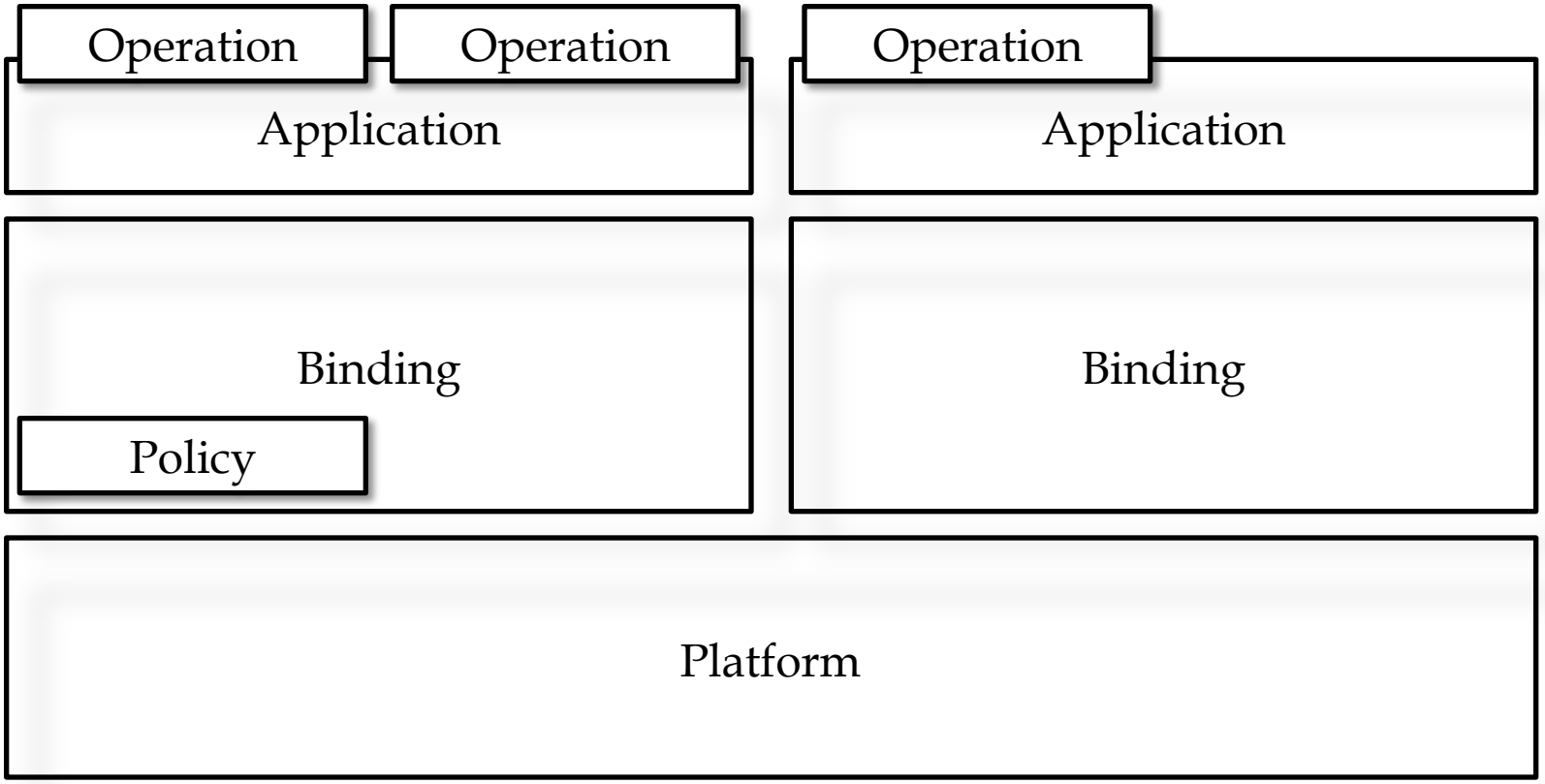
Policy Scoping: Application Binding



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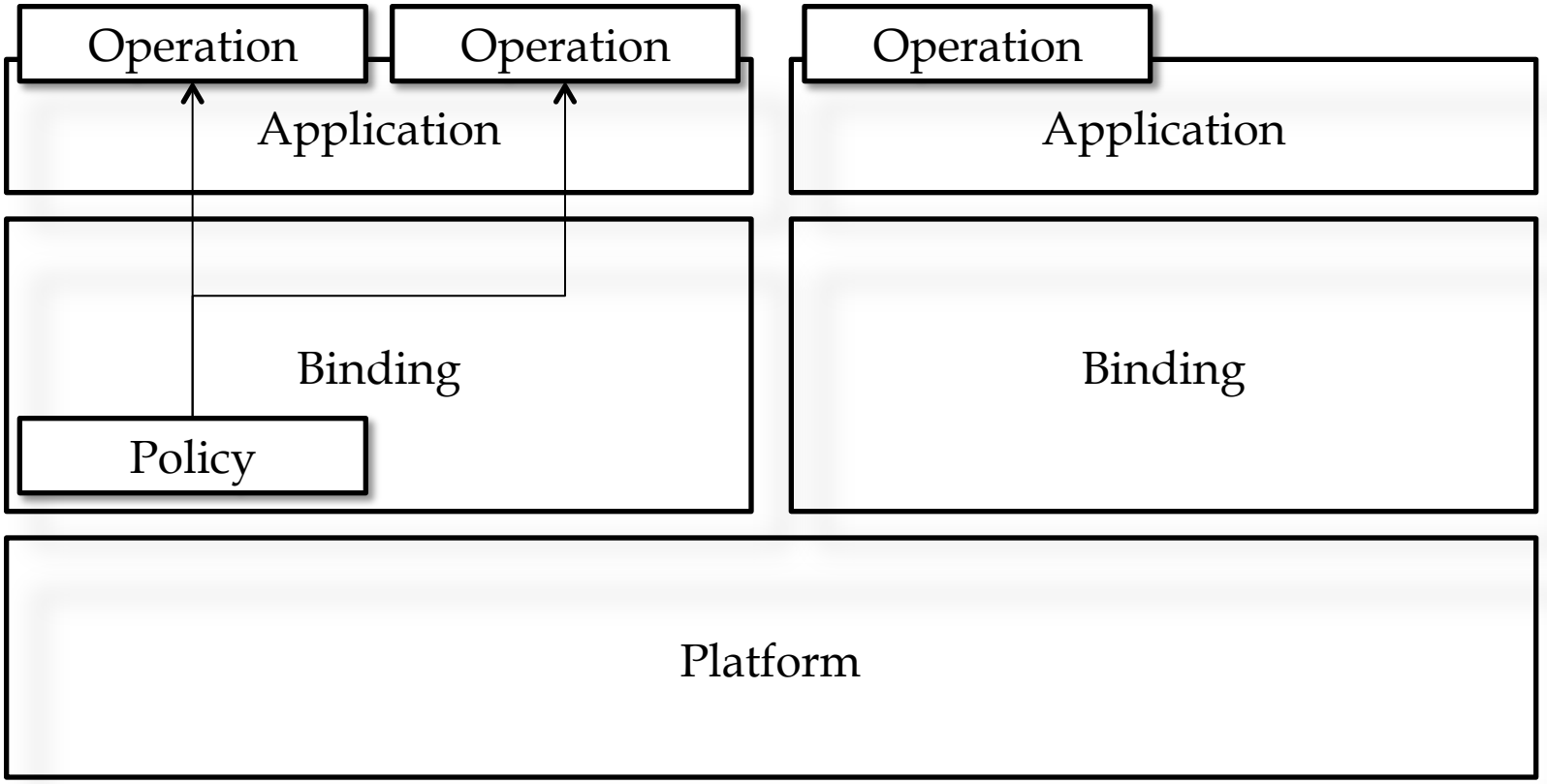
Policy Scoping: Application Binding



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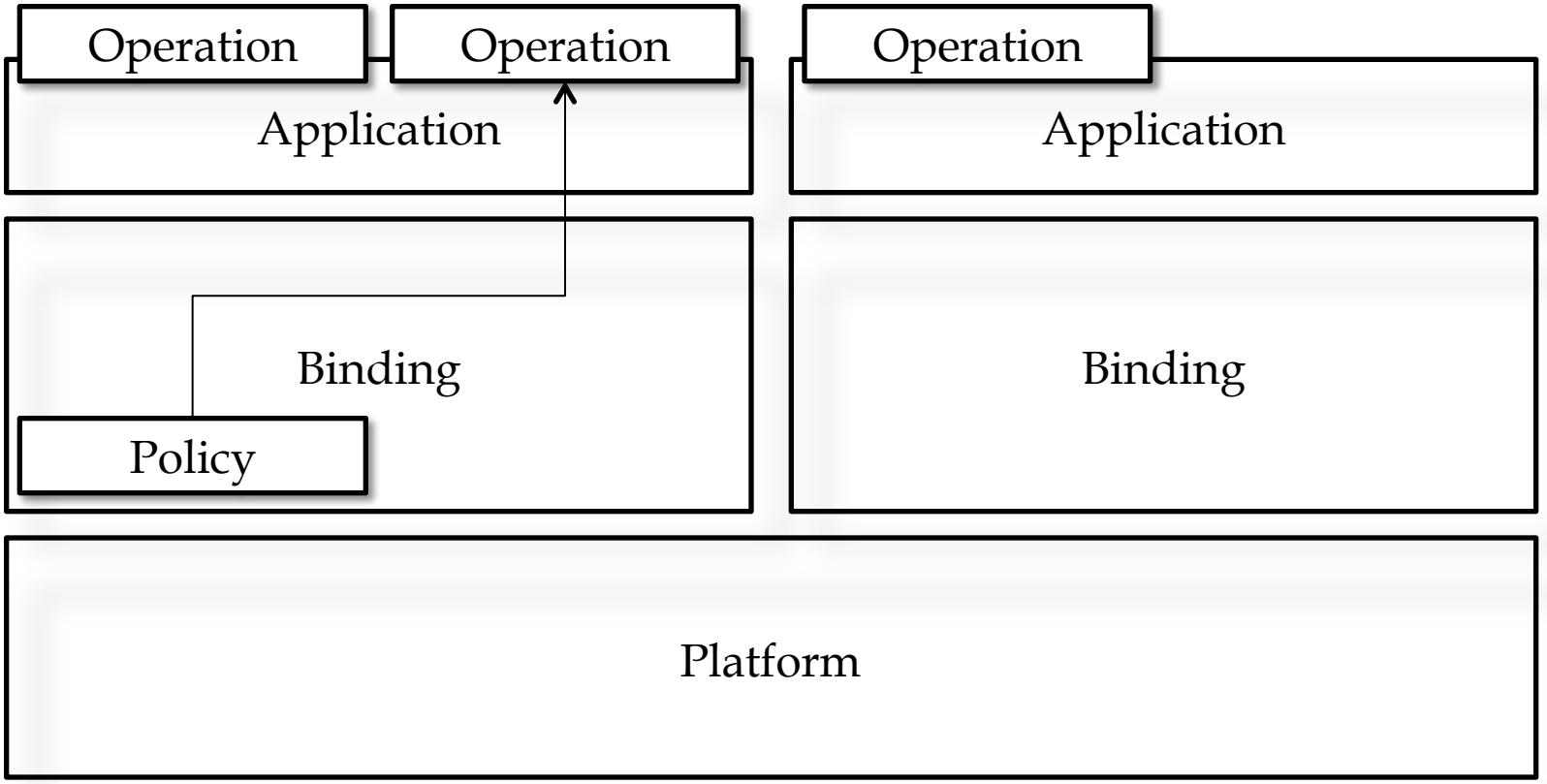
Policy Scoping: Application Binding



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New First Class ~~Concept~~ Resources

- **Application & Application Binding**
- Platform
- Policy

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Application Binding

An Application Binding bundle

A collection of zero or more CICS bundles

A set of deployment rules

Life-cycle with Application as a single entity

Removes direct dependency between Application and Platform

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Application Binding Package

Name

org.maw.banking.binding.Loans

Version

1.2.1

Additional CICS bundles

Resources

Dependencies

Deployment Rules

CICS bundle -> region type

Policy

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Application Binding Lifecycle – Choose Platform

Create Application bundle project

Create Binding bundle project

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Application Binding Lifecycle – Additional Bundles Included

Create Application bundle project

Create Binding bundle project

Export Application package to zFS

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Application Binding Lifecycle – Use Deployment Rules

Create Application bundle project

Create Binding bundle project

Export Application package to zFS

INSTALL Application onto a Platform

ENABLE/DISABLE Application

DISCARD Application

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Application Binding Lifecycle – Logically part of Application

Create Application bundle project

Create Binding bundle project

Export Application package to zFS

INSTALL Application onto a Platform

ENABLE/DISABLE Application

DISCARD Application

Application status (DISABLED | ENABLING | …)

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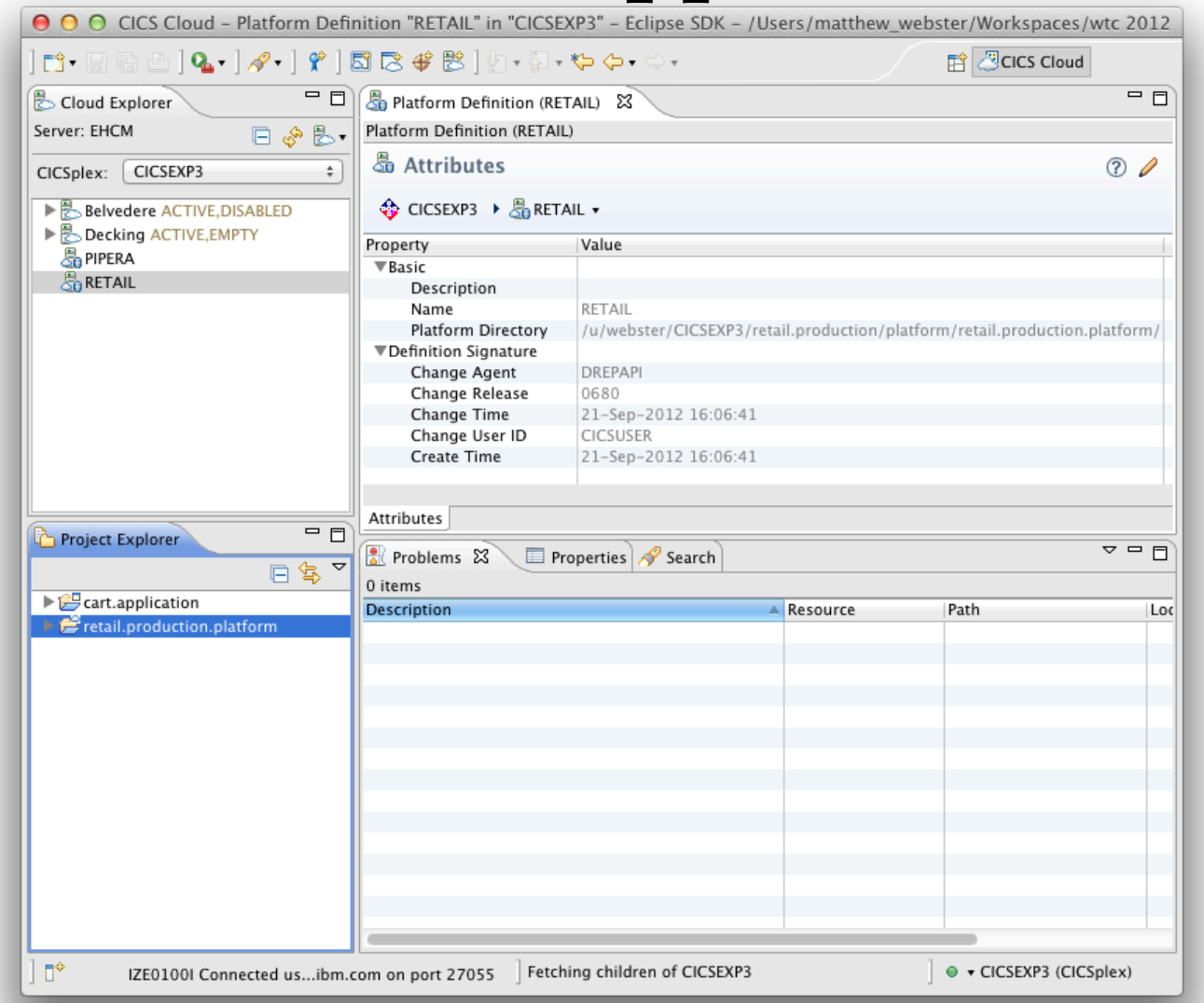
Demonstration: Application Binding



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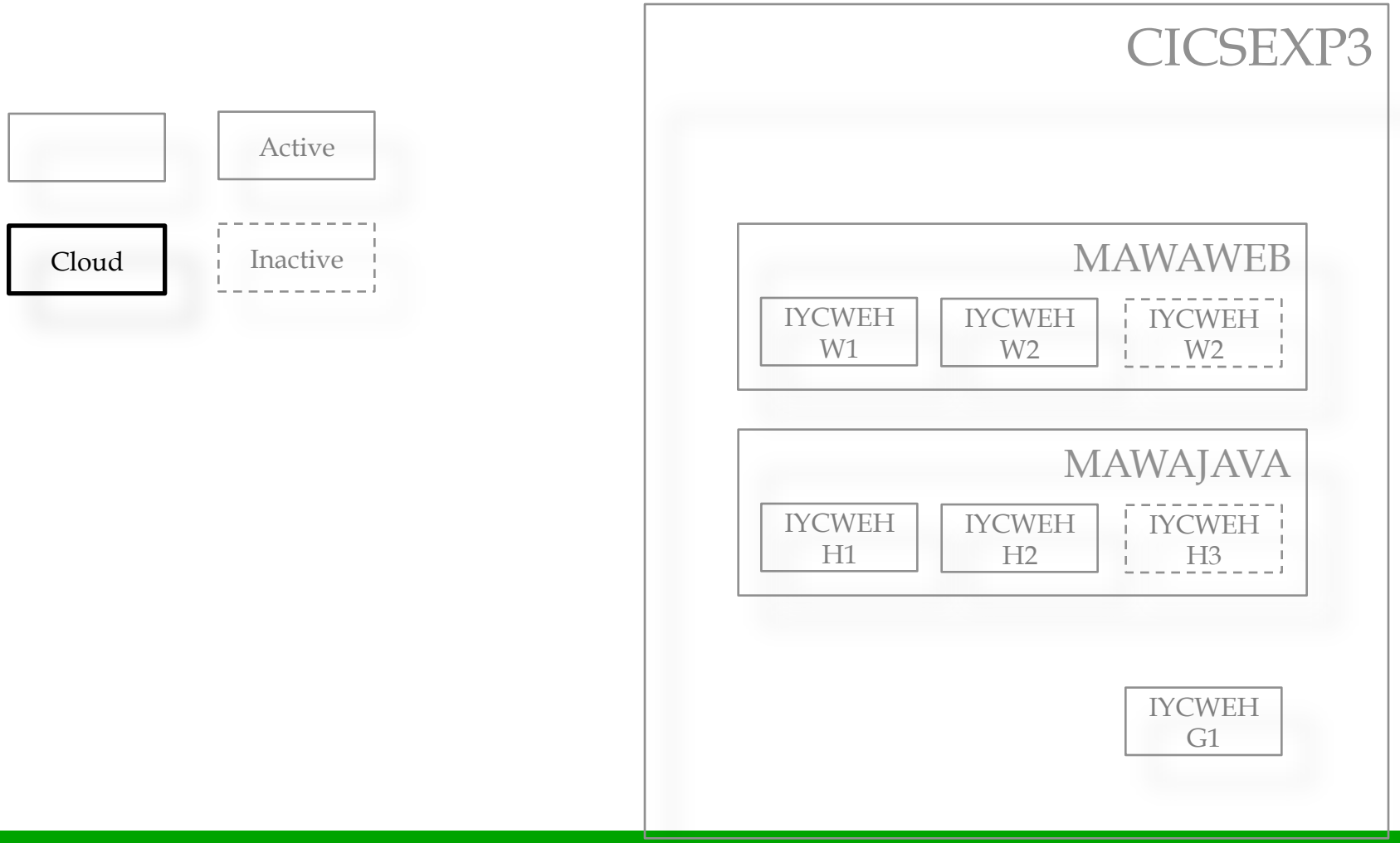
Existing CICSplex CICSEXP3



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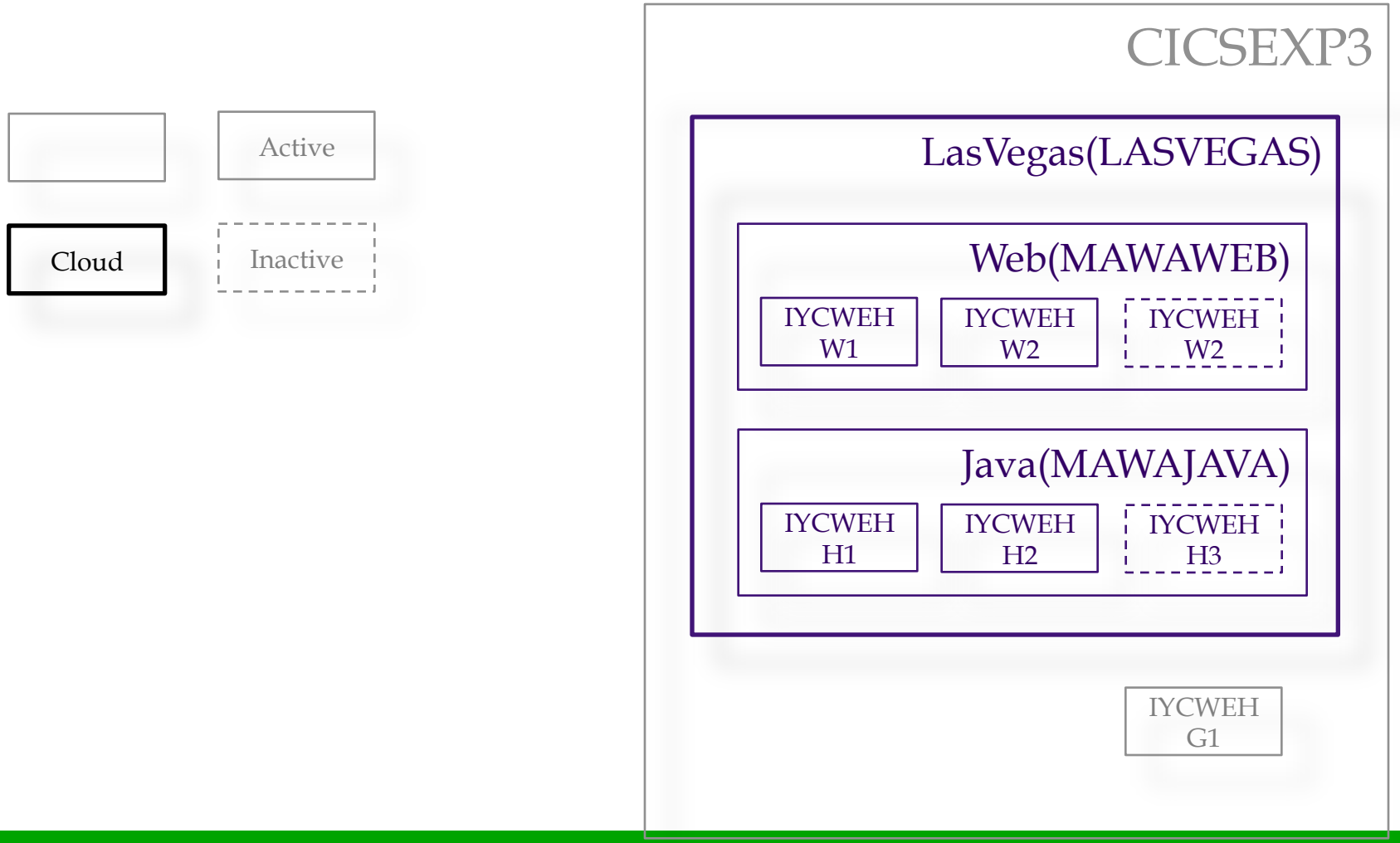
Adopt Groups in CICSEXP3



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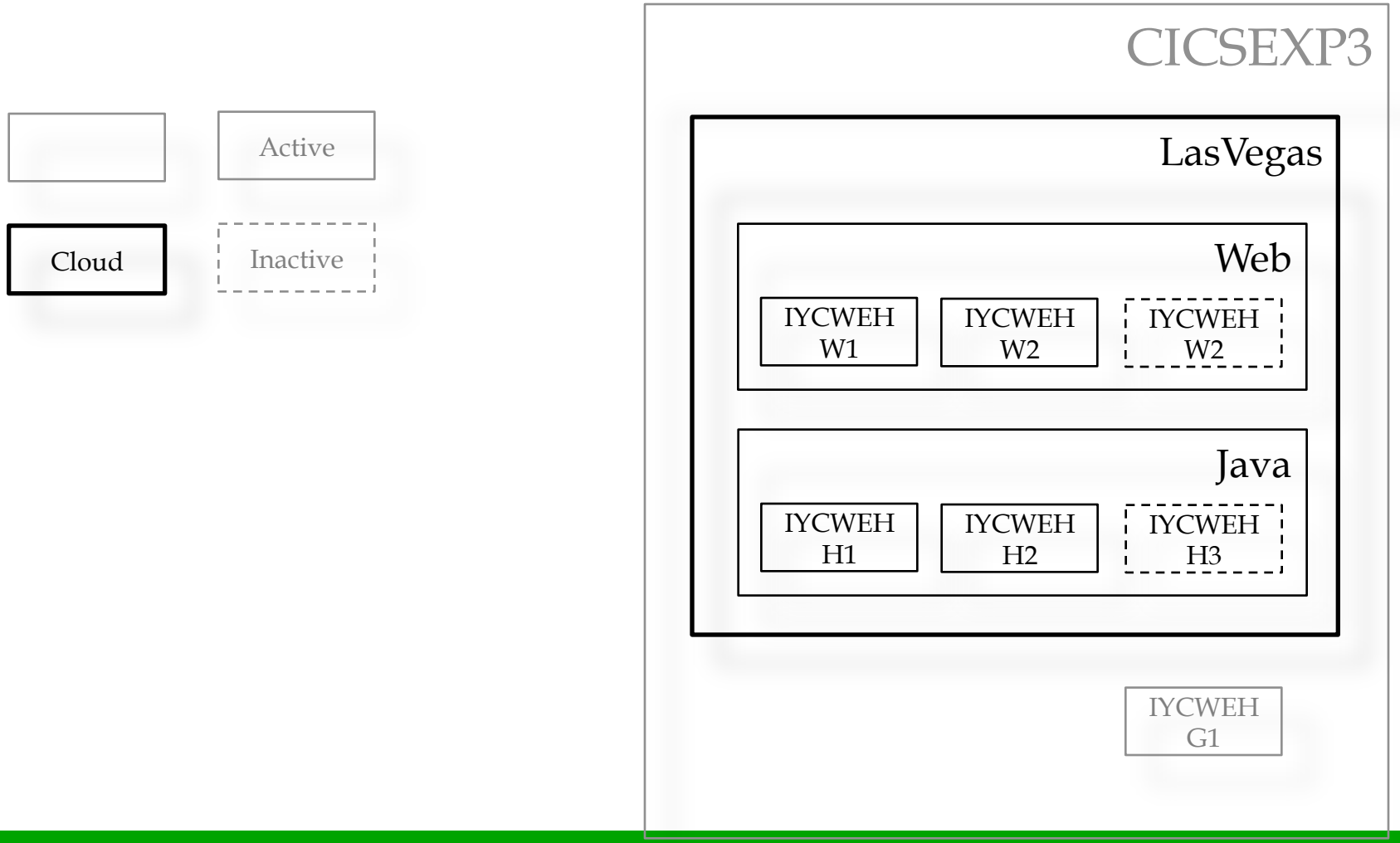
Adopt Groups in CICSEXP3



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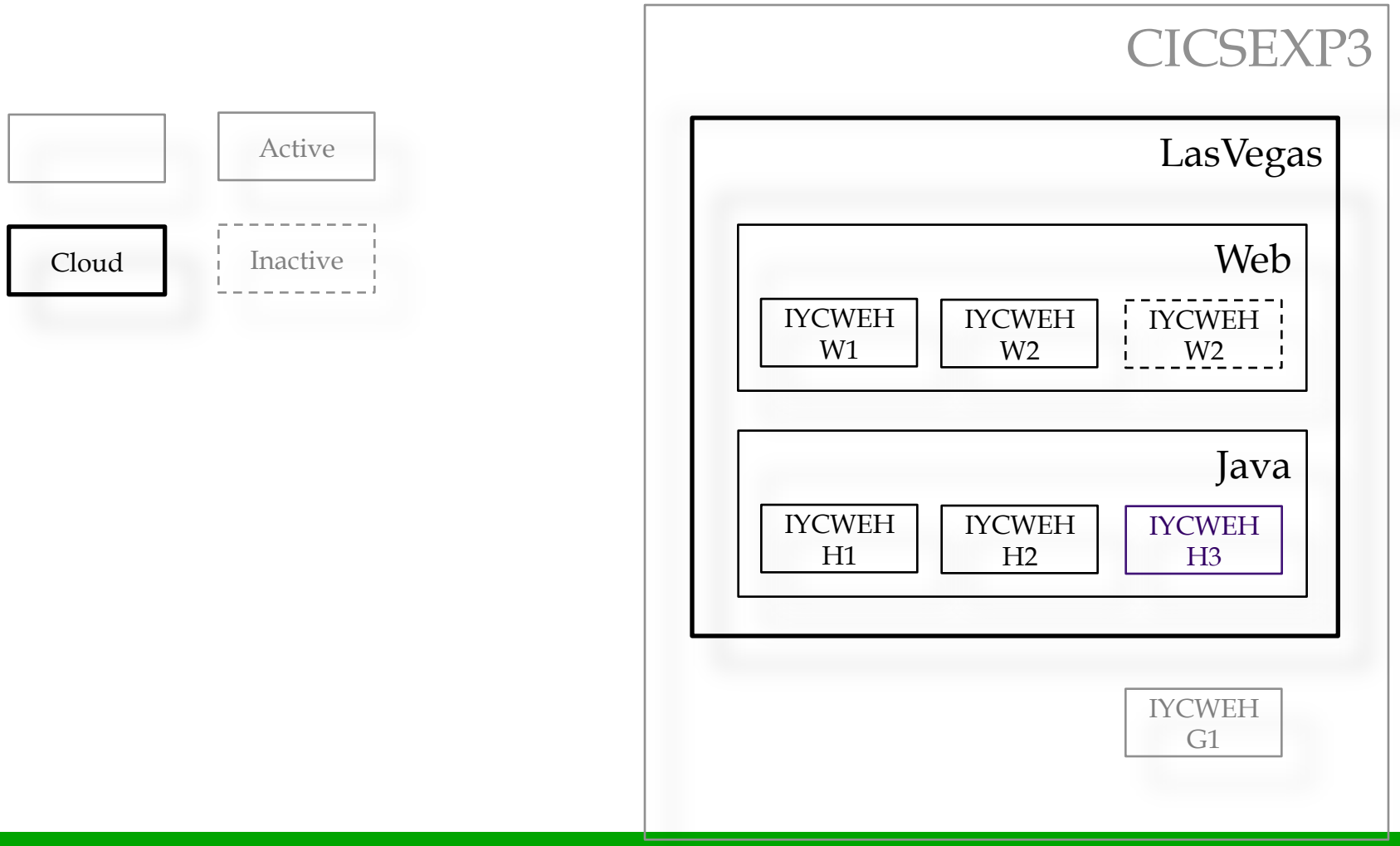
START/STOP Regions



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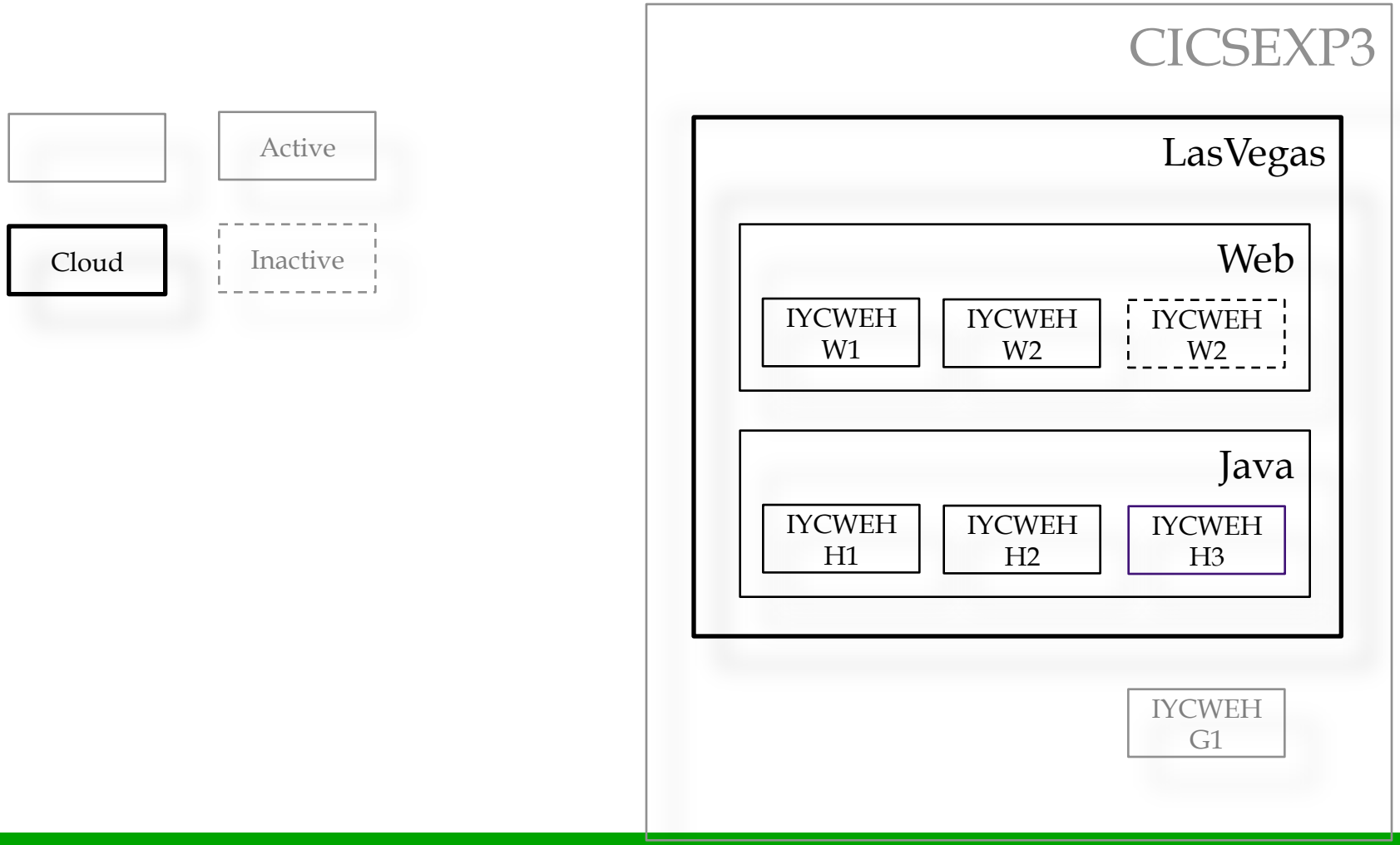
ADDBUNDLE & REMOVEBUNDLE



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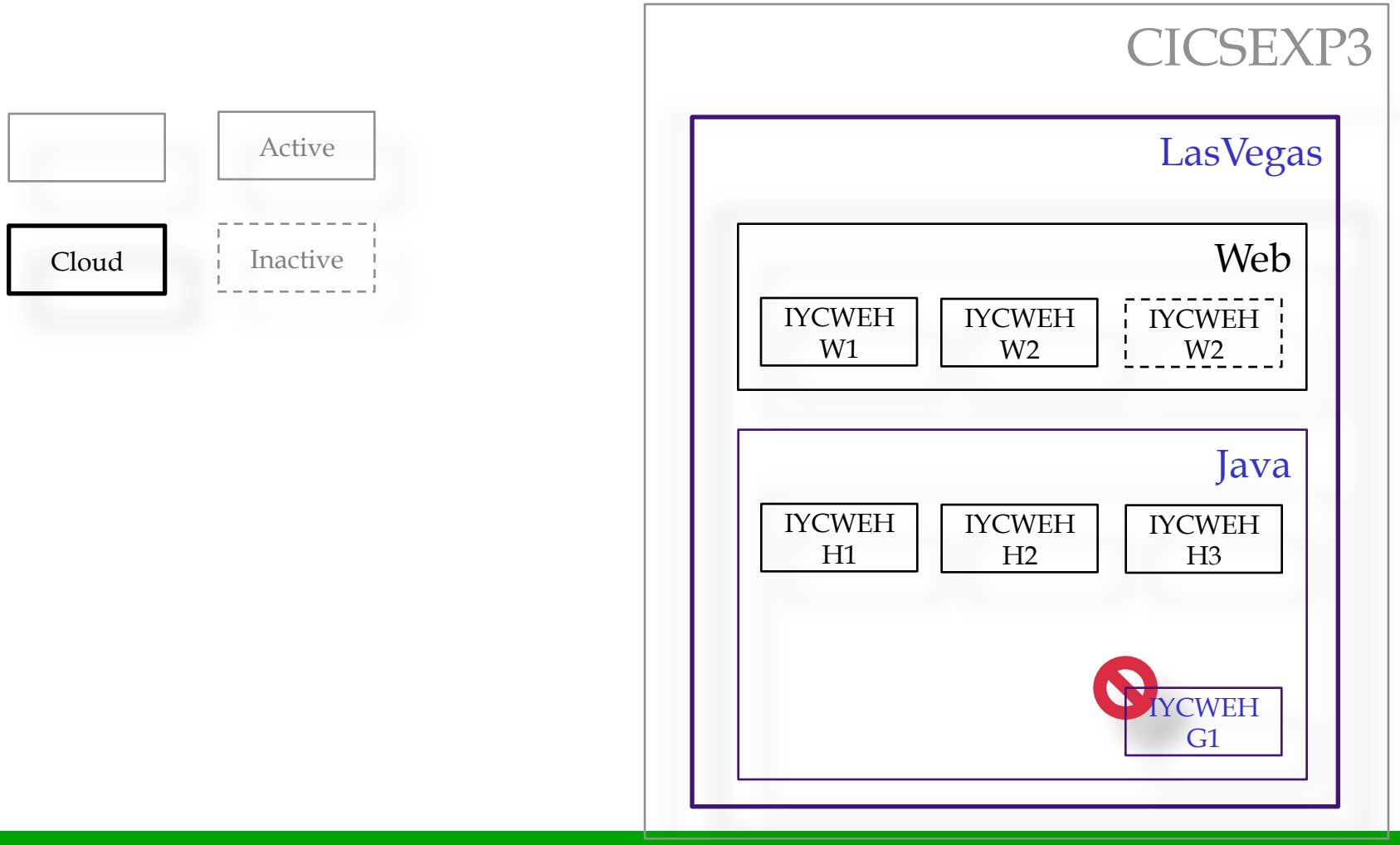
Control Topology Changes



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Standard zFS Directory Structure

/var/cicsts/CICSEXP3/platforms/berlin.platform
/var/cicsts/CICSEXP3/platforms/lasvegas.platform
/var/cicsts/CICSEXP3/platforms/…

/var/cicsts/CICSEXP3/berlin/applications
/var/cicsts/CICSEXP3/berlin/bindings
/var/cicsts/CICSEXP3/berlin/bundles
/var/cicsts/CICSEXP3/berlin/platform/lasvegas.platform

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New Security Profiles

- CLOUD.DEF.*context*
- CLOUD.PLATFORM.*context*
- CLOUD.APPLICATION.*context*

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Platform Management using CICS Configuration Manager

Create Application and Platform definitions

Audit updates

Maintain consistency of non-bundle resources

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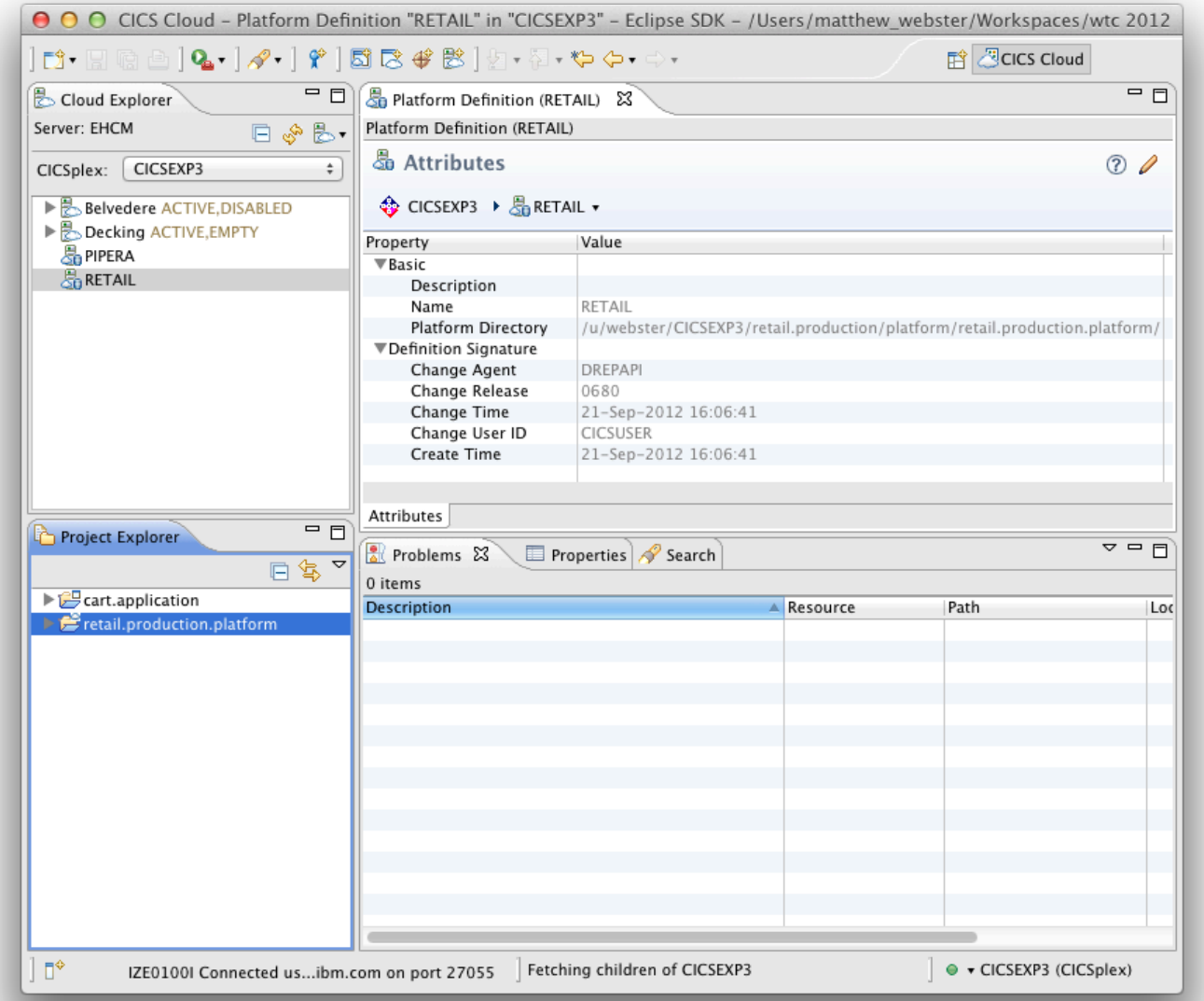
Demonstration: CICS Configuration



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Summary

An Application Binding is be used to deploy the same Application to different Platforms

A Platform can evolve to meet the requirements of new or updated Applications and changing operational demands

CICS DA can help you quickly set up your Platform

CICS Configuration Manager enables you to efficiently manage the new Application & Platform definitions

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Questions?

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More Information

- "CICS TS"
  - http://www.ibm.com/cics/
- developerWorks Community
  - https://www.ibm.com/developerworks/mydeveloperworks/blogs/cicsdev/
- "Did you say mainframe?! " Podcasts
  - http://itunes.apple.com/us/podcast/did-you-say-mainframe-!/id275831334

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CICS TS Highlights

Monday	
1030	CICS Portfolio update
1300	CICS TS: A Technical Overview
Tuesday	
0900	CICS TS: Touching the Cloud – Introducing Enterprise Services
1030	CICS TS: Introduction to Applications as first class entities
1030	*CICS Portfolio update*
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1430	*CICS TS: A Technical Overview*
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1030	CICS TS: Support for WebSphere Application Server Liberty profile
1300	CICS TS: Java and the JVM Server
1430	CICS TS: Scalability Enhancements

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