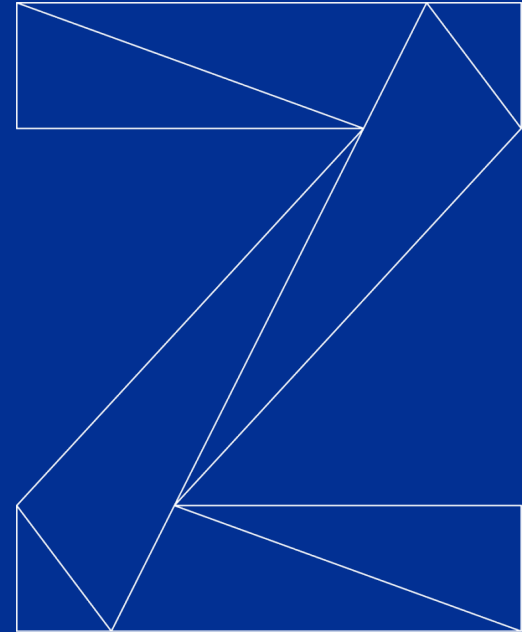


# Infrastructure as code

## Yes, it applies to z/OS as well

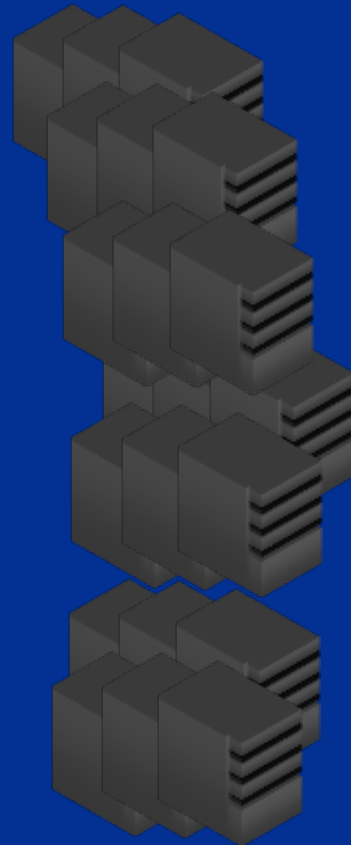
Rosalind Radcliffe  
IBM Distinguished Engineer  
Chief Architect for DevOps for Enterprise Systems  
[rradclif@us.ibm.com](mailto:rradclif@us.ibm.com)  
[@RosalindRad](#)



# Infrastructure as code

Infrastructure as code provides ability to define the infrastructure such that the definition is stored in the same source code manager as the application source code, and such that infrastructure can be recreated repeatedly and reliably.

For the large number of distributed systems this has been a requirement for a long time, and helps with configuration drift

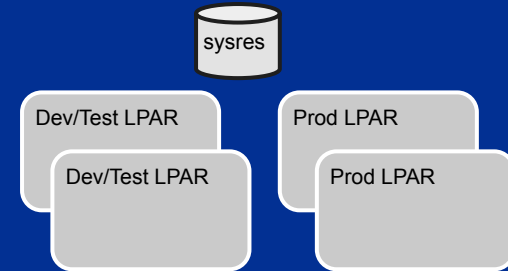


# Infrastructure as code – what about z/OS?

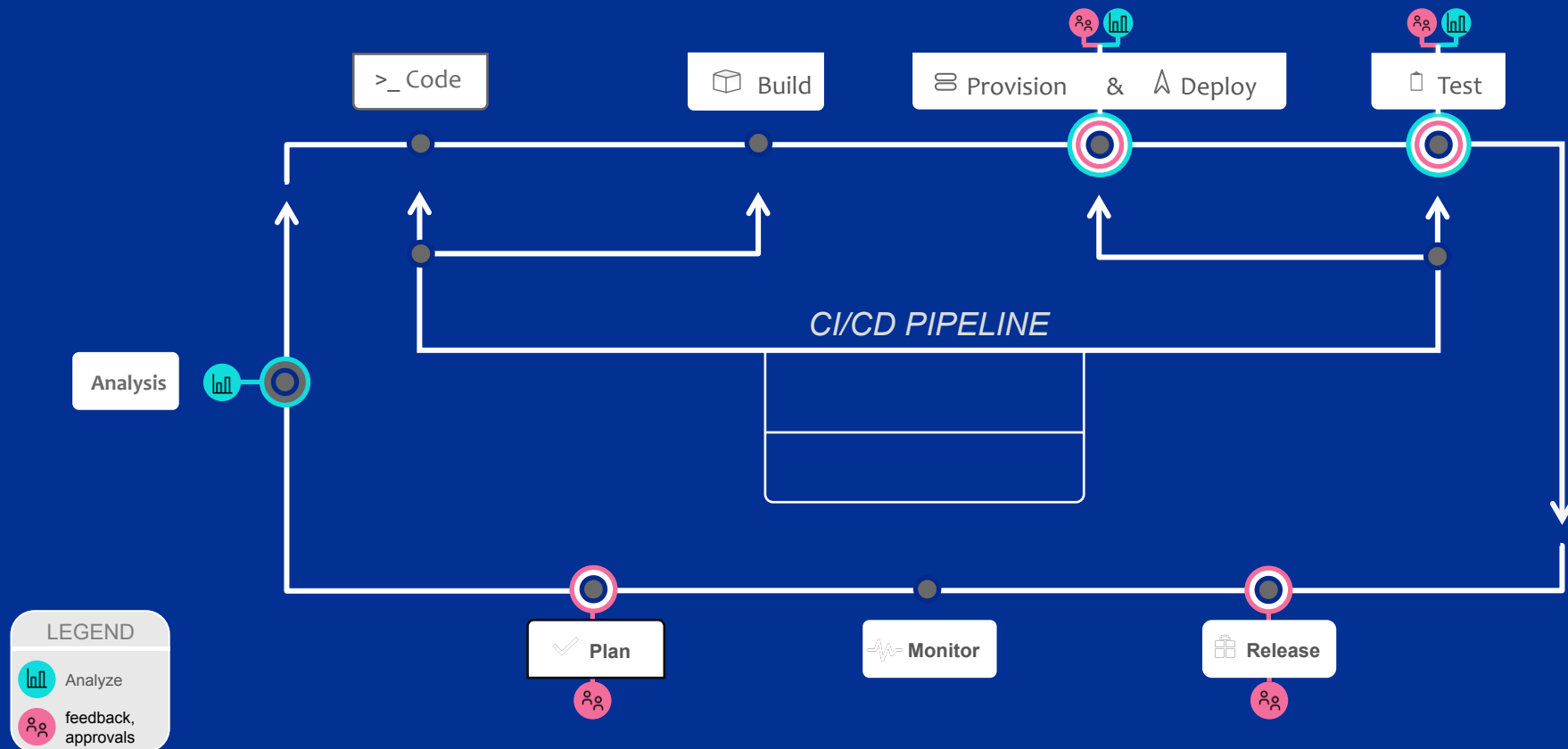
z/OS Sysres (operating system and middleware software) is usually shared across systems already so this is not variable.

Usually limited number of systems. Configuration primarily for application configuration in middleware.

JCL generally used to configure system, but it's personal JCL for each system programmer



# Pipeline



# What's your pipeline

Bring z/OS into your existing pipeline with common open source tools.



Azure  
Boards



Azure  
Repos



Azure  
Pipelines




Azure  
Test Plans



Azure  
Artifacts



 IBM / dbb

Unwatch 18

Unstar 11

Fork 15

<> Code

Issues 2

Pull requests 2

Projects 0

Wiki

Security

Insights


Branch: master dbb / Automation / idManagement /

Create new file





Upload files


Find file

History

 drbruce-git Initial Load Latest commit 7848d79 on Mar 16

..

 README.md	Initial Load	3 months ago
 useradd.groovy	Initial Load	3 months ago
 useradd.properties	Initial Load	3 months ago
 userdel.groovy	Initial Load	3 months ago

 README.md

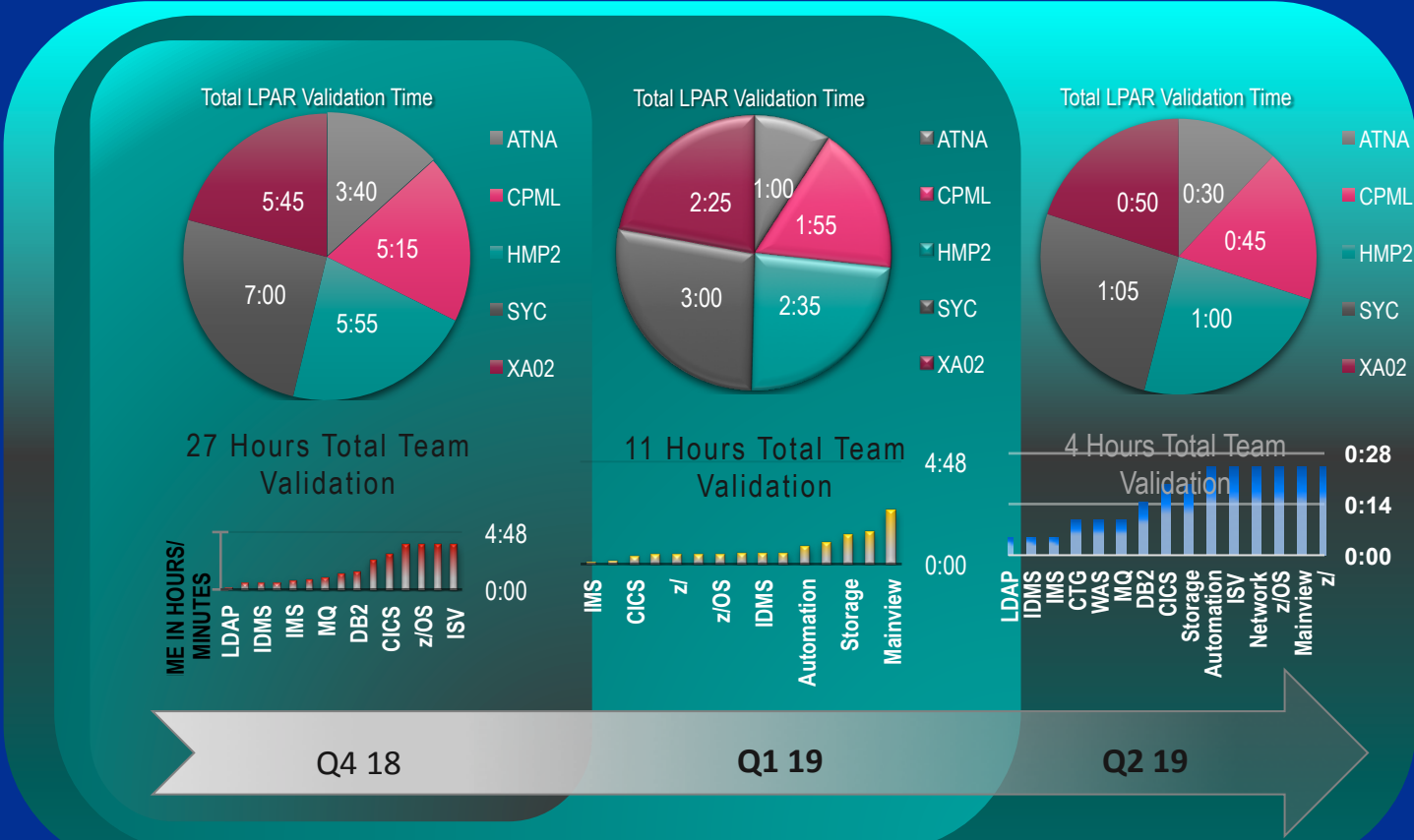
## Userid Management

The sample scripts here create and delete users on a z/OS system. There are three files in this sample. The samples are based on RACF interfaces.

useradd - a groovy script that adds a new user to the system. It is meant to have a linux look and feel. In addition to providing the RACF commands to add a user, it adds a default dataset profile and an alias. It relies on a properties file that allows an

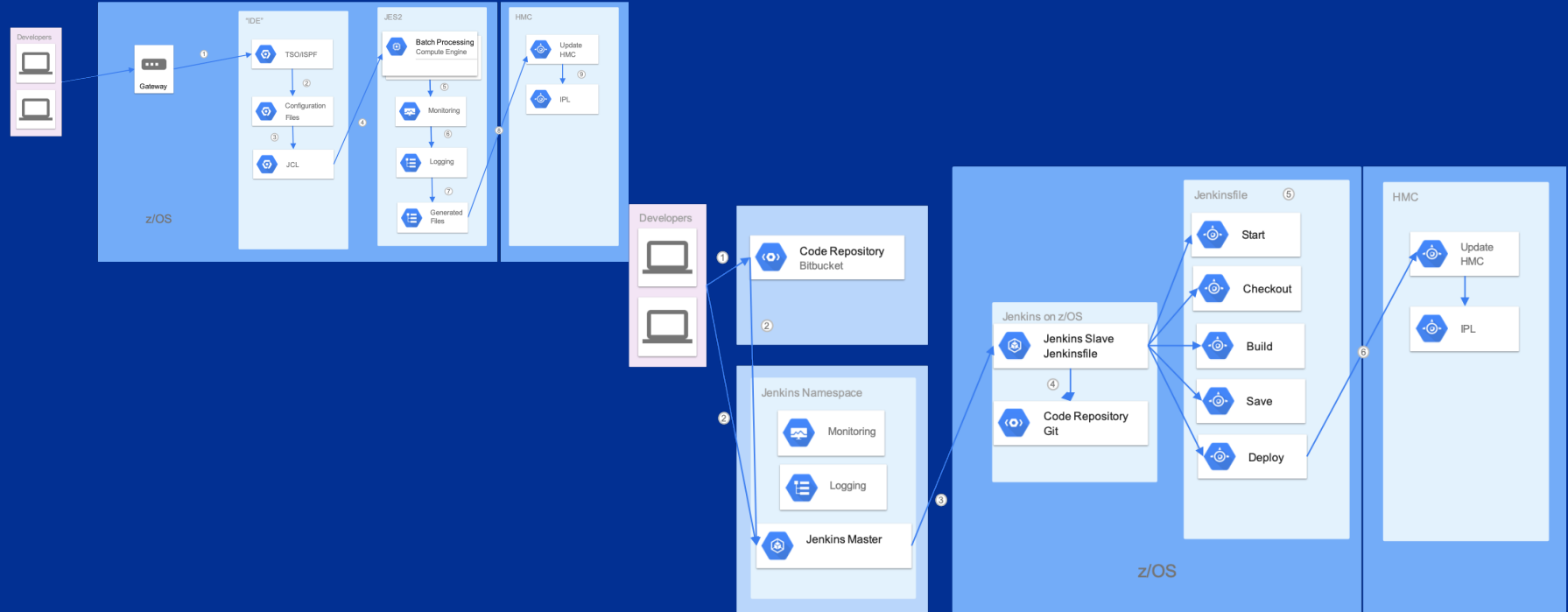
<https://github.com/IBM/dbb>

# Customer improvement using pipeline with automated verification



# Automated pipeline for creating z/OS LPAR

<https://github.com/edge05/zJenkins>







# Zowe

Zowe, a top level project of Open Mainframe Project



<https://www.zowe.org>



[zowe-user@lists.openmainframeproject.org](mailto:zowe-user@lists.openmainframeproject.org)

## Browser-based Web Desktop

The screenshot displays the Zowe Browser-based Web Desktop. On the left, there's a sidebar with 'Api Document' and 'JES job APIs'. The main area shows a Swagger-defined API for JES jobs, with endpoints like GET /api/v1/jobs/{jobName} and POST /api/v1/jobs/dataset. A central console window shows a JES job log with details like 'JOB 208 LOG - STTER RV27'. At the bottom, a Node.js-based CLI interface is visible, showing commands like 'bright zos-files' and 'DESCRIPTION Manage z/OS data sets and USS files'.

## Swagger-defined z/OS REST APIs

## API Mediation Layer (Gateway, Discovery Service, Catalog)

### API Mediation Layer API

The API Mediation Layer for z/OS internal API services. The API Mediation Layer provides a single point of access to manage REST APIs and offers enterprise cloud-like features such as high-availability, scalability, dynamic API discovery, and documentation.

#### apicatalog

#### API Catalog

##### API Homepage

API Catalog service to display service details and API documentation for discovered API services.

#### API Catalog

API Version: 1.0.0

[ Base URL: [cslb.ca.com:8080/api/v1/apicatalog](http://cslb.ca.com:8080/api/v1/apicatalog) ]

REST API for the API Catalog service which is a component of the API Mediation Layer. Use this API to retrieve information regarding catalog dashboard files, file contents and its status, API documentation and status for the registered services.

## Node.js- based CLI

# What I need help with

Which open source tools do you use and want to use on z/OS?

What else can we provide to help you modernize your z/OS environment?

# Thank you

Rosalind Radcliffe  
IBM Distinguished Engineer  
Chief Architect for DevOps for Enterprise Systems

---

[rradclif@us.ibm.com](mailto:rradclif@us.ibm.com)  
@RosalindRad  
+1-919-695-5180  
ibm.com

© Copyright IBM Corporation 2019. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. Any statement of direction represents IBM's current intent, is subject to change or withdrawal, and represent only goals and objectives. IBM, the IBM logo, and ibm.com are trademarks of IBM Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available at [Copyright and trademark information](#)

