

USCIS DEVSECOPs Demo Application

This document describes the architecture and technical details for USCIS DEVSECOPs demo application and contains links to all the relevant technologies.

1. Application Access

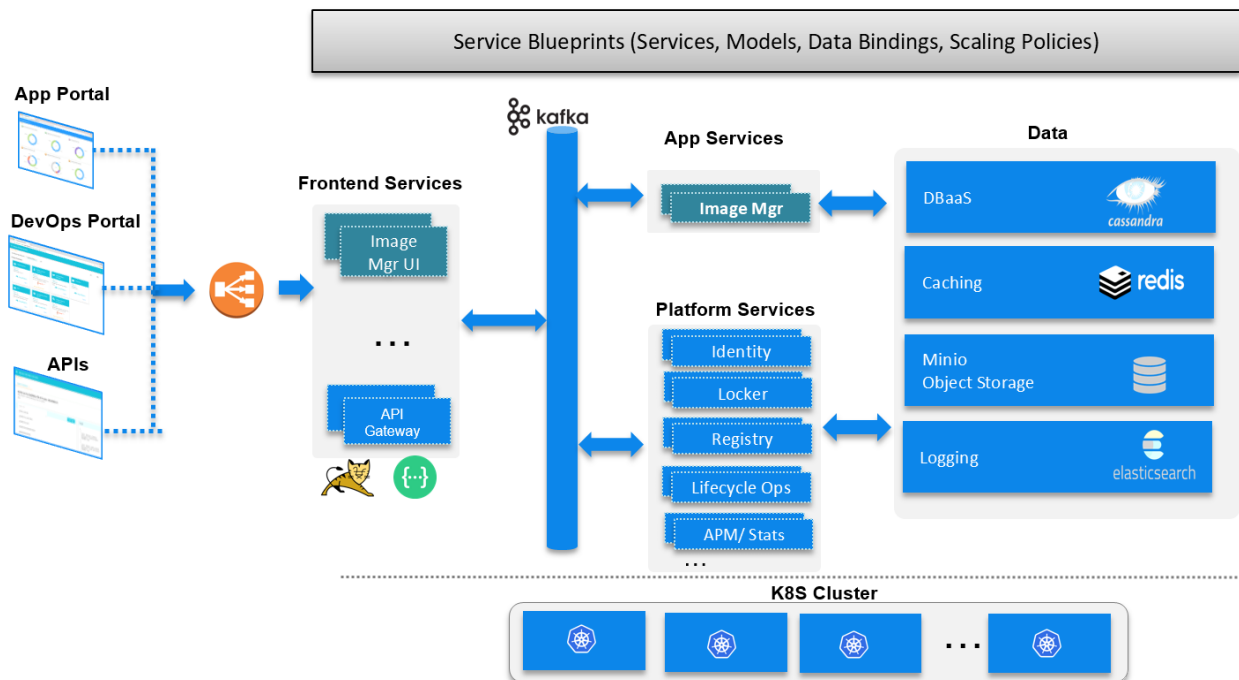
Here are the important links to access the demo application deployed on AWS.

- The Image Upload Web site can be accessed at <https://ec2-35-168-116-172.compute-1.amazonaws.com/image-manager/>
- The Image Approval Web site can be accessed at <https://ec2-35-168-116-172.compute-1.amazonaws.com/image-manager/list.html>
- The Macaw console can be accessed at <https://ec2-35-168-116-172.compute-1.amazonaws.com/console-ui/login.html>

2. Architecture

This demo application is a Microservices based cloud native application developed using Macaw Microservices Framework. Macaw is an enterprise grade Microservices platform for developing large scale enterprise cloud native applications. More information about Macaw can be obtained at <https://macaw.io/index.html>

The following diagram shows the architecture of Demo Application along with Macaw Components



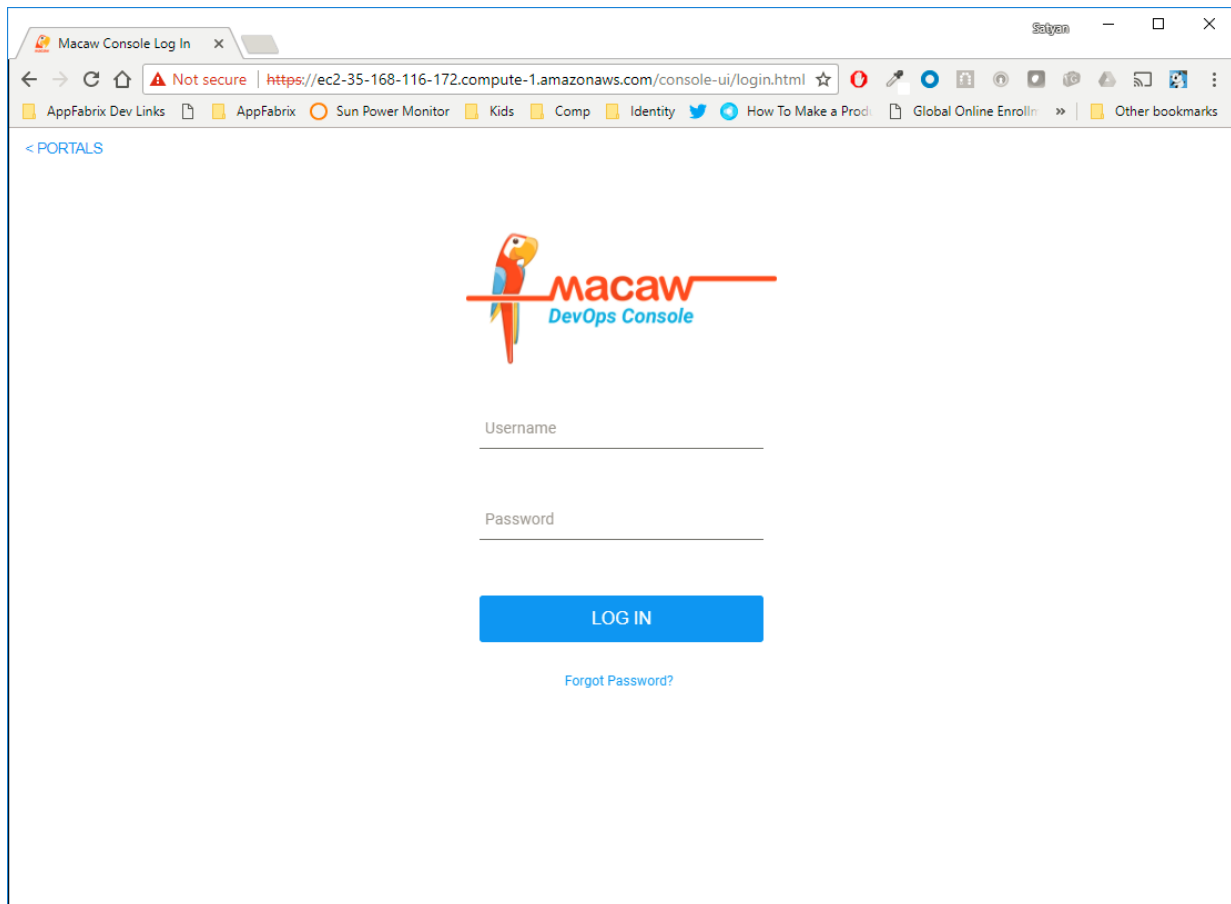
The demo application was built using the following technologies.

- Macaw Microservices Framework (<https://macaw.io>)
- Deployed using Kubernetes as Container orchestration platform (<https://kubernetes.io/>)
- Docker containers for containerizing Microservices (<https://www.docker.com/>)
- Cassandra as Database (<http://cassandra.apache.org/>)
- Minio as Object Storage (<https://www.minio.io/>)
- Microservices were developed using Java
- The UI interface was developed using AngularJS (<https://angularjs.org/>)

3. Browsing Application Artifacts

Macaw DevOps Console provides ability to manage the life cycle of any Macaw Microservices based applications. Using Macaw DevOps Console, the developers/admins can deploy new services, view deployed services, view logs, and access the service APIs etc.

First users need to login into Macaw Console




Macaw Console Log In

Not secure | <https://ec2-35-168-116-172.compute-1.amazonaws.com/console-ui/login.html>

AppFabrix Dev Links | AppFabrix | Sun Power Monitor | Kids | Comp | Identity | How To Make a Prod | Global Online Enrollment | Other bookmarks

< PORTALS



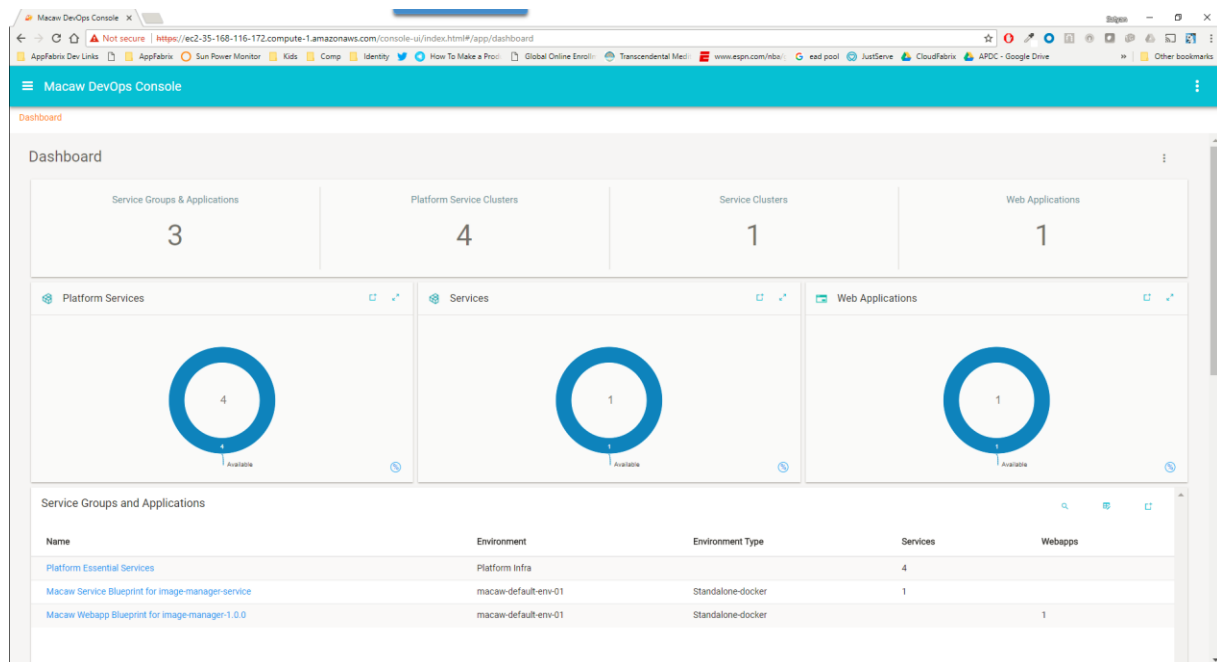
Username

Password

LOG IN

[Forgot Password?](#)

Once they login they will be see all platform services and user services and their status in the dashboard



They can click on image-manager-service from the Service Clusters Report (users need to scroll down in the dashboard to see this report) to get the dashboard for the Image Manager Service

| Service Clusters | | | | | | | |
|-----------------------------|---------|---|----------------------|-------------------|-----------------|---------------------|------------------------------------|
| Service | Version | Namespace | Environment | Environment Type | Total Instances | Available Instances | Image Tag |
| identity-service | 0.6.0 | http.macaw.io.schema.identity.service.rev150707 | Platform Infra | | 1 | 1 | |
| service-provisioner-service | 0.6.0 | http.macaw.io.schema.serviceprovisioner.rev150729 | Platform Infra | | 1 | 1 | |
| user-preferences | 1.0.0 | io.macaw.services | Platform Infra | | 1 | 1 | |
| locker-service | 0.6.0 | http.macaw.io.schema.locker.rev160315 | Platform Infra | | 1 | 1 | |
| image-manager-service | 1.0.0 | http.macaw.io.service.image.manager.rev180123 | macaw-default-env-01 | Standalone-docker | 1 | 1 | image-manager-26-jan-2018_name_fix |

The Service Dashboard allows users to manage life cycle of the service. It allows users to provision new instances, de-provision existing instances, browse APIs, view logs etc.

Macaw DevOps Console

Dashboard / Service Cluster (image-manager-service) < Back

image-manager-service (c52b39d6-4cb1-449d-9b61-a5ab595c63a2)

| Total Instances | | Available | |
|-----------------|--|-----------|--|
| 1 | | 1 | |

Service Instances

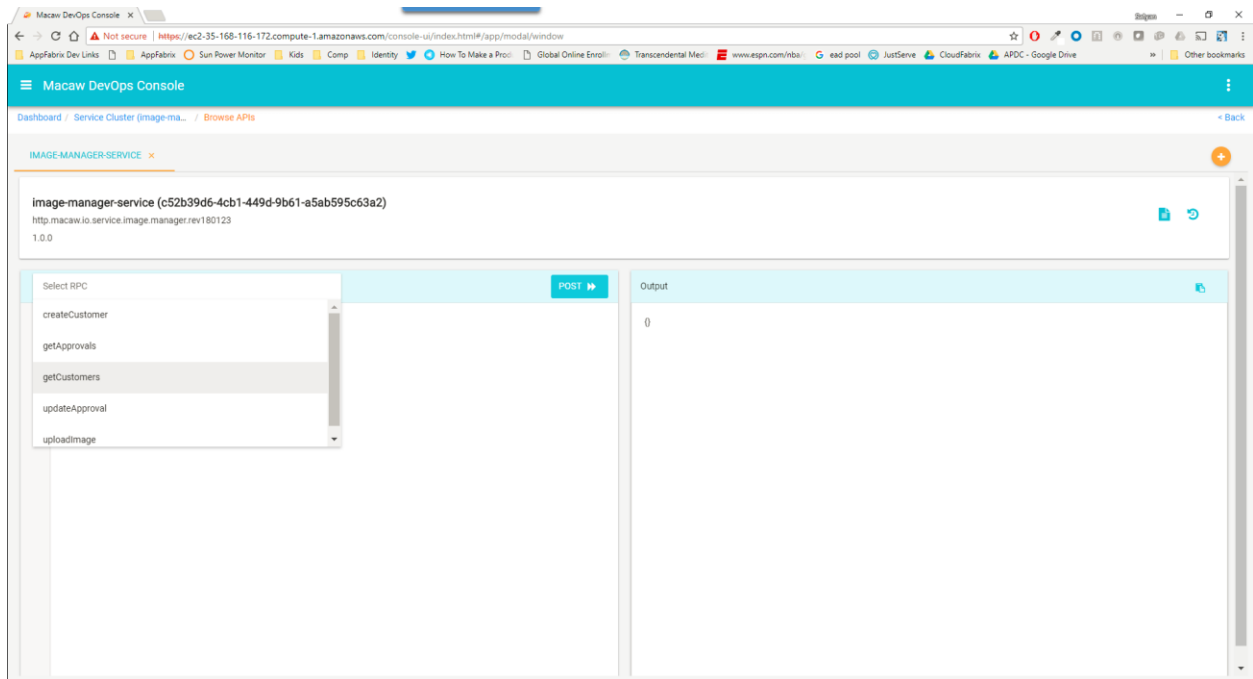
| Container Id | Instance Id | State | Image Tag |
|--------------|--------------------------------------|-----------|------------------------------------|
| 201a1381800d | 2b34cf5e-6646-43a7-ab36-c0521d8af19a | Available | image-manager-26-jan-2018_name_fix |

- View Details
- Pause
- Deprovision
- View Docker Info
- View ES Logs
- Instance Metrics

They can view all available options by clicking on the menu in the Service Instances report. Since we have deployed only once instance, there would be only one row in this report. For example users can see the Docker Container details by selecting “View Docker Info” menu item

The complete Docker info along with the container logs are shows

For the demo service we can browse all available APIs using the API Browser



For example if “getCustomers” API is selected (and click on **Post>>**) , then all available customers are shown (as JSON output) on the right side of the window .

Additional Macaw DevOps Console documentation can be found at

<https://www.macaw.io/documentation/#devconsole>