DevOps Documentation



Product Owner: Coen Meulenkamp

Scrummaster:

Developers: Oualid, Lior, Wessel and Doreen

[Assignment](https://github.com/sentialabs/public-cloud-recruitment/blob/master/ASSIGNEMENT.md)

[Presentation](https://docs.google.com/presentation/d/1loAmMQLPOKpa6aU-YeWOXSalhtOLa-BxSz6XbeBlZZI/edit#slide=id.p)

[DevOps Sheets for Graphs/Tables](https://docs.google.com/spreadsheets/d/1yNmsADkPMRsliEtP_W-I0PhN2RtIoc9g9RWAjJIu3N8/edit#gid=0)

[Diagram.IO](https://app.diagrams.net/#Wc5f42219964bea2c%2FC5F42219964BEA2C!9652)

Kibana

Github Repo

Architecture

To migrate from on premise to the public cloud we will be using AWS as our cloud provider

**We will also follow along with the**  [**5 migration steps:**](https://serverguy.com/cloud/aws-migration/)

Planning and Assessment

Migration Tools

AWS Cloud Storage

Migration Strategies

Application Migration Options

**Tools**

* Google Docs
* Google Slides
* Kibana Dashboard
* AWS Management Console
* Jira
* Github
* Slack
* Zoom

**Assumptions**

Since we will be moving forward from On premise to the cloud, we are thinking of several tools to use, and trying to implement managed services. We will be using the following:

* EC2
* DynamoDB
* S3 - Intelligent Tiering
* Database Migration Service (DMS)
* IAM
* VPC
* Lambda
* CloudFormation
* EFS
* Parameters
* CloudWatch logs
* ElasticSearch Service

The current On Premise environment of Sentia Recruitment vs the managed services we would like to use in AWS

| On Premise | Public Cloud |
| --- | --- |
| NodeJS app | Elastic Beanstalk |
| NGINX reverse proxy | Lightsail |
| FTP Server | EFS |
| Cron Server | Lambda |
| MongoDB | DynamoDB/S3 |
| Kibana Dashboard | ElasticSearch Service |
|  |  |

**Requirements**

* (must) be scalable and flexible.
* (must) utilize managed services as much as possible.
* (nice to have) be modernized during this migration in terms of infrastructure technologies used
* Cost Optimization

**Assignment**

The main assignment is to transform and migrate the 3 environments to the Public Cloud. These consist of Test, Acceptance and Production

*Tomorrow*

* *Update Wessel*
* *Github account*
* *Kibana gebeuren (Elasticsearch service)*
* *Inplannen (Jira/Poker)*
* *Een start maken met de Architectuur*

## **Deliverables**

Please provide the following:

1. An architectural design for all the components and all the environments.
2. An IaC project for deploying an MVP demo (excluding the CRON and the ElasticSearch requirements).
   * for AWS, write your IaC using: AWS CDK (preferred), or alternatively with AWS CloudFormation.
   * for Azure, write your IaC using: Bicep (preferred), or alternatively with ARM Templates.
3. Include a simple time log of the activities you have performed.
4. Document any assumptions and decisions you have made.
5. A GIT repo with all the above.