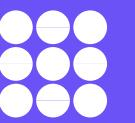


VIRTUALIZATION FINAL PROJECT



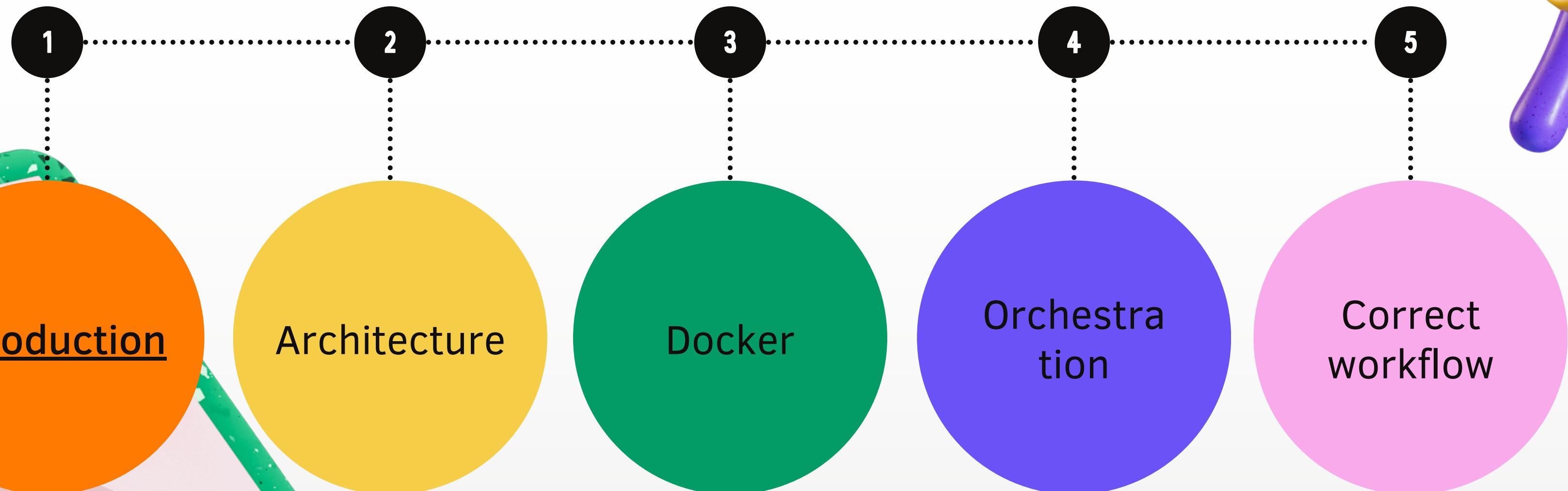
Add company name

ADD DATE


This presentation is optimized for whiteboard use

Add a short description

STEPS



1

Master Controller is responsible for correct work of each deployment and pod, for API requests, defines which API request should be handled by a certain pod or deployment. Does health check for every part of the cluster and detects microservices fall, preventing it by replacing defective pod by its replica

2

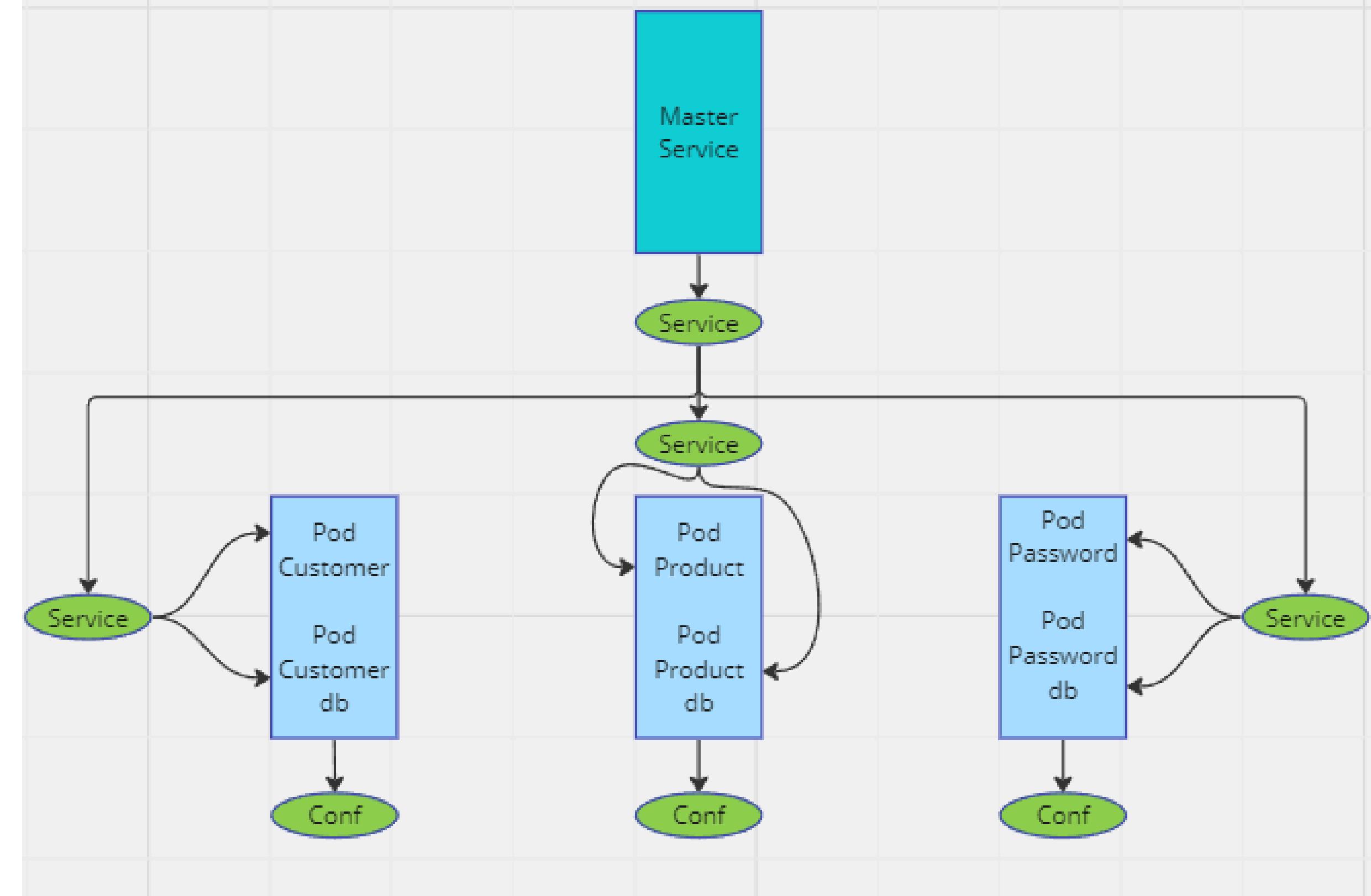
Service is a Port handler and communicator between parts of the cluster like Pods, Master, Deployments. Service manages what will be sent to a certain pod and transports the answers.

3

Configuration is used to deploy and change everything the pod consists of. For example: its image, app, type, port, and etc.

4

Eventually the whole cluster is stable and works correctly and can work without microservices fail, Master controls and does self-healing work and simultaneously checks the health of each pod all running time, which allows cluster non-stop workflow.



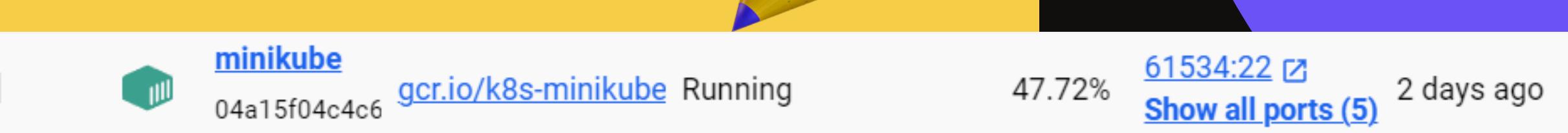
Architecture

DOCKER

Every pod in the cluster has its own image created in docker, also it can be updated by docker while a replica of the pod will hold the process smooth.

We can see our image in the deployment configurations

Example:



```
spec:  
  containers:  
    - name: customer  
      image: customer-service  
      ports:  
        - containerPort:
```

NEXT STEPS

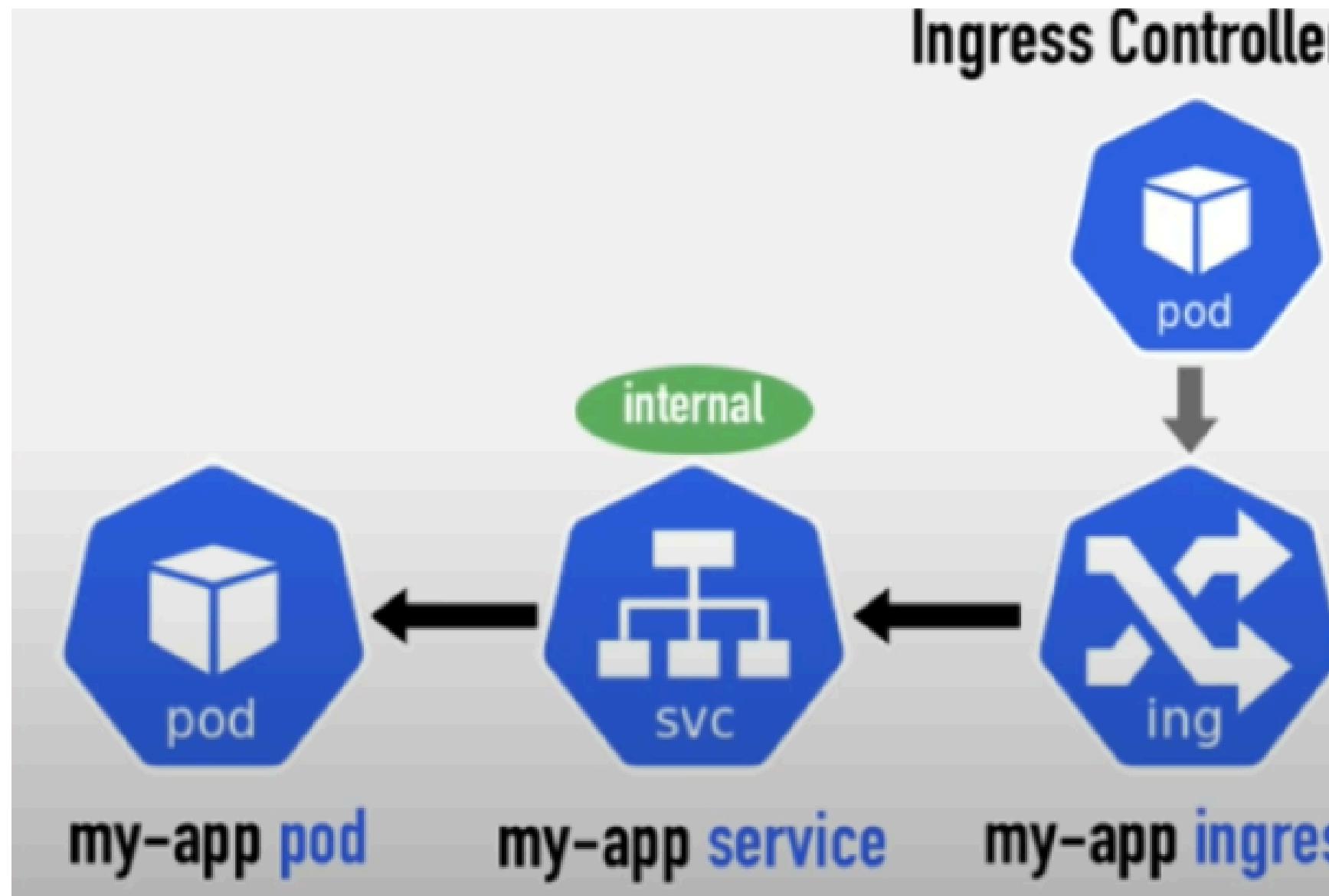
WE CREATED MAIN DEPLOYMENT PARTS LIKE:

- Customer
- Customerdb
- Password
- Passworddb
- Product
- Producdb

1. CUSTOMER POD SHOULD CONTAIN DOCKER CONTAINER WHICH HAS CUSTOMERS INFORMATION ANALYSIS, CACHING, AND REQUEST HANDLERS
2. CUSTOMER DB POD IS AN EXTERNAL GCS BUCKET WHICH CONTAINS TABLES FOR STORAGE OF THE INFORMATION ABOUT CUSTOMER
3. PASSWORD POD IS USED FOR SECURITY APPROACH, TO PREVENT ANY PRIVATE INFORMATION LEAKING, ALSO FOR OVERALL SAFETY
4. PASSWORD DB POD IS A LOCAL STORAGE WHICH CONTAINS TABLES FOR STORAGE OF THE INFORMATION ABOUT CUSTOMERS PASSWORD AND PRIVATE COOKIES
5. PRODUCT POD SHOULD CONTAIN DOCKER CONTAINER WHICH HAS PRODUCT INFORMATION ANALYSIS, CACHING, AND REQUEST HANDLERS
6. PRODUCT DB POD IS AN EXTERNAL GCS BUCKET WHICH CONTAINS TABLES FOR STORAGE OF THE INFORMATION ABOUT PRODUCT

CORRECT WORKFLOW

Integrated Ingress and Master Controller makes workflow non-stop and does health-checks





THANKS

