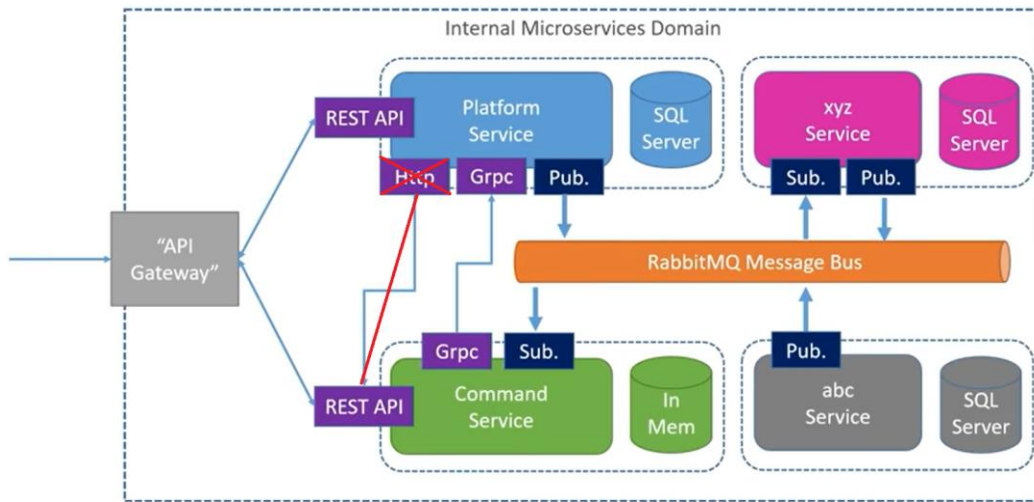
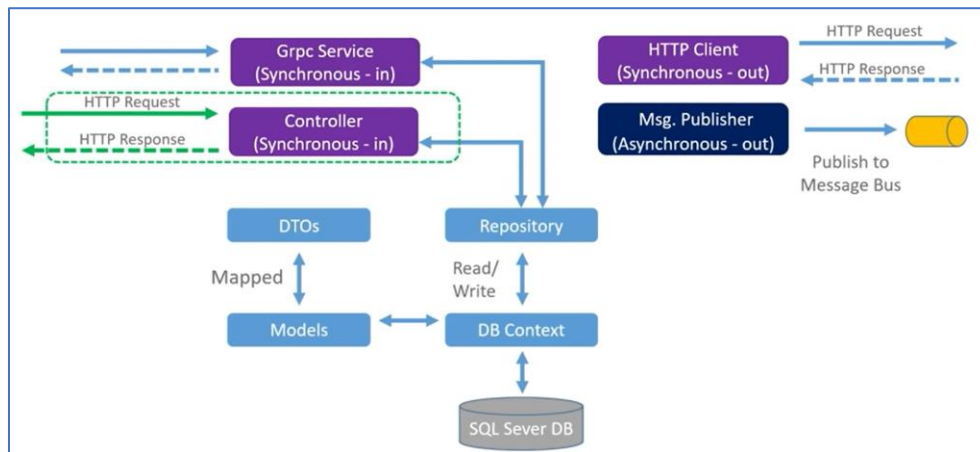


## Microservices Best Practices Project

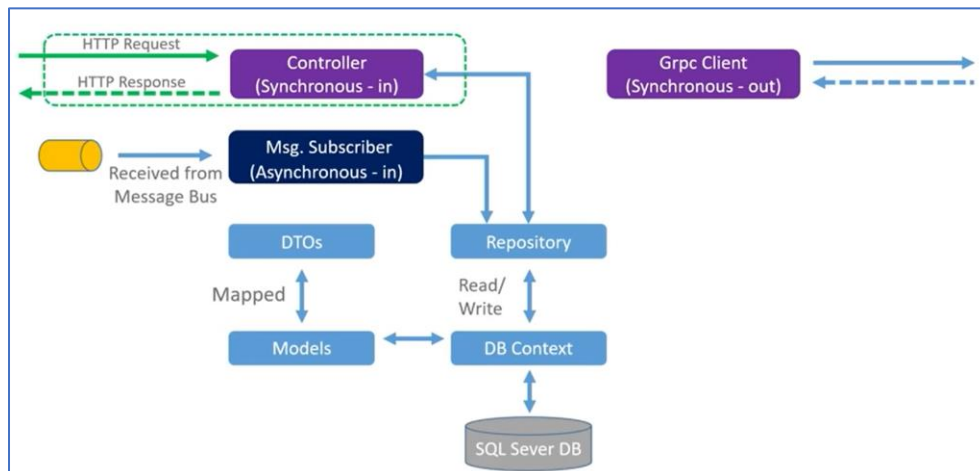
Stav Sofer 2021



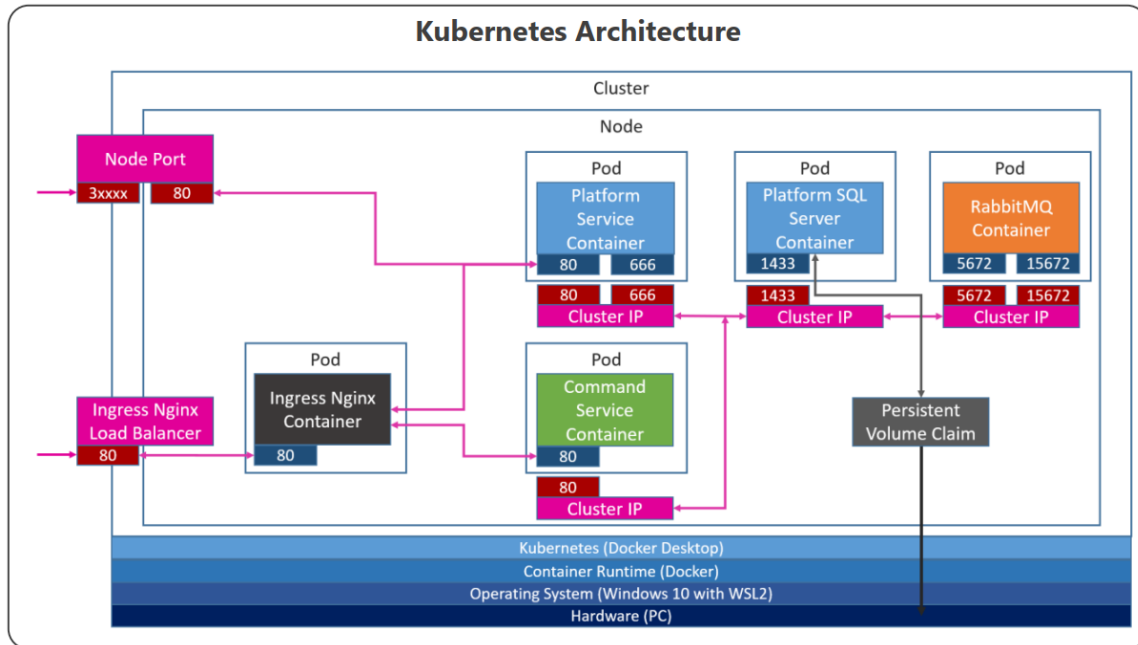
Platforms Service:



Commands Service:



Based on Les Jackson course: <https://youtu.be/DgVjEo3OGBI>



### Technologies In Use:

- Dotnet 5
- Microservices
- Docker
- Kubernetes
- Synchronous Http Restful API
- Synchronous gRPC & Protobufs
- Asynchronous Events Based Messaging using RabbitMQ
- Background Service
- API Gateway – Ingress Nginx
- Dependency Injection & Interface-Repository Approach
- Data Transfer Objects (DTOs)
- Auto Mapper
- Entity Framework Core

## Endpoints & URIs:

Local base URL: <https://localhost:5001/> & <https://localhost:6001/>

Production base URL: <http://acme.com/>

### Platforms

**GET** /api/Platforms

**POST** /api/Platforms

**GET** /api/Platforms/{id}

### Commands

**GET** /api/c/platforms/{platformId}/Commands

**POST** /api/c/platforms/{platformId}/Commands

**GET** /api/c/platforms/{platformId}/Commands/{commandId}

### Platforms

**GET** /api/c/Platforms

## K8S Pods on Docker Desktop:



k8s\_platformservice\_platforms-depl-5868588f7-znmcv\_default\_63047bd9-4846-4127-9a71-2674b6d356bc\_0 stavsofer/com...  
RUNNING



k8s\_commandservice\_commands-depl-7cb7c8d88-h74x8\_default\_5dfb9d5d-e137-48d1-a8b7-d1b05e34be0f\_4 stavsofer/com...  
RUNNING



k8s\_mssql\_mssql-depl-856b8c48fd-fs6sh\_default\_012ae1bb-20da-4353-9f9e-2fb5b2dcfe88\_5 sha256:5af364e...  
RUNNING



k8s\_controller\_ingress-nginx-controller-fd7bb8d66-bds4s\_ingress-nginx\_e5a634b2-83f2-462d-b277-01341914ca7a\_6 sha256:ef43679...  
RUNNING



k8s\_rabbitmq\_rabbitmq-depl-76f9ff665c-w97fv\_default\_3cdf4c0d-bedc-47de-bbcc-3d442768bce4\_3 sha256:3e83da...  
RUNNING

## Useful Commands:

### Docker:

```
docker build -t <docker user id>/<image name>:<version> .  
docker push <docker user id>/<image name>:<version>  
docker ps  
docker run -p <external port>:<internal port> -d <docker user id>/<image name>  
docker stop <container Id>  
  
docker start <container Id>
```

### K8S:

```
Kubectrl apply -f <name of yaml file>  
  
Kubectrl rollout restart deployment <name of deployment>  
  
Kubectrl get namespace  
  
Kubectrl get deployments  
Kubectrl get pods --namespace=<name of namespace>  
  
Kubectrl get <object type>  
Kubectrl delete <object type> <object name>
```