

Build from the ground up the
infrastructure for the 1st Digital Bank
in Greece

Are you Ready?

Praxia Bank



First Digital bank
in Greece



All you need is a
mobile.



Challenger Bank,
e.g: Revolut, N26

Legacy Environment



On-premises cloud



Challenges



First Digital bank in Greece with cloud-based environment



Near Zero RTO - RPO



Security (Application, Network and Access Management)



Availability



Automated procedures



DevOps - NetOps - DevSecOps Culture

Datacenters

- ▶ 2 sites on premises and 2 regions on cloud
- ▶ Hyperconverged platform on each datacenter
- ▶ Fully redundant network
- ▶ Dynamic network protocols (BGP - OSPF)
- ▶ DevOps - NetOps -DevSecOps culture
- ▶ Access policy management

Hybrid Cloud Infrastructure

- ▶ On Premises cloud for key valued applications
- ▶ Microservices Implementation (Main - DR - TEST/UAT)
- ▶ Virtual Storages (GlusterFS)
- ▶ Logging (Application Level, Endpoint)
- ▶ Advanced cloud services (AKS, CDN, Cloud WAF, GSLB)

On premises applications

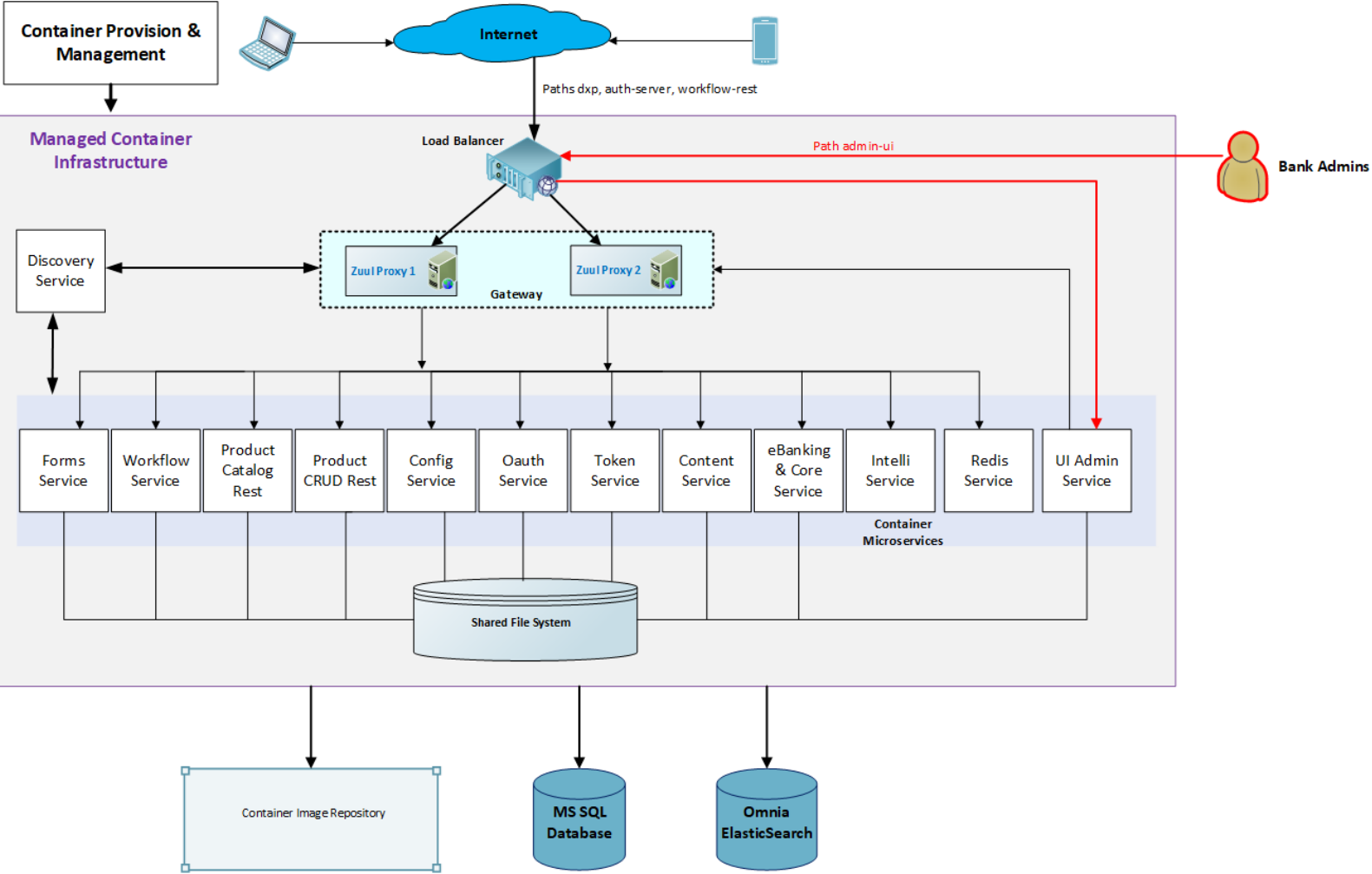
- ▶ Core Banking
- ▶ Service Bus
- ▶ Document management system
- ▶ E-Signature
- ▶ Anti-Fraud
- ▶ eBanking
- ▶ Registration Platform



Registration Platform

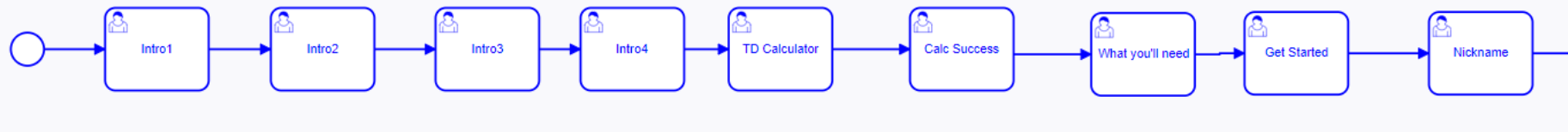
- ▶ Spring boot application
- ▶ Config Server
- ▶ Discovery Server
- ▶ Load balancer
- ▶ Other pods (Token Rest, OCR)

Registration Platform

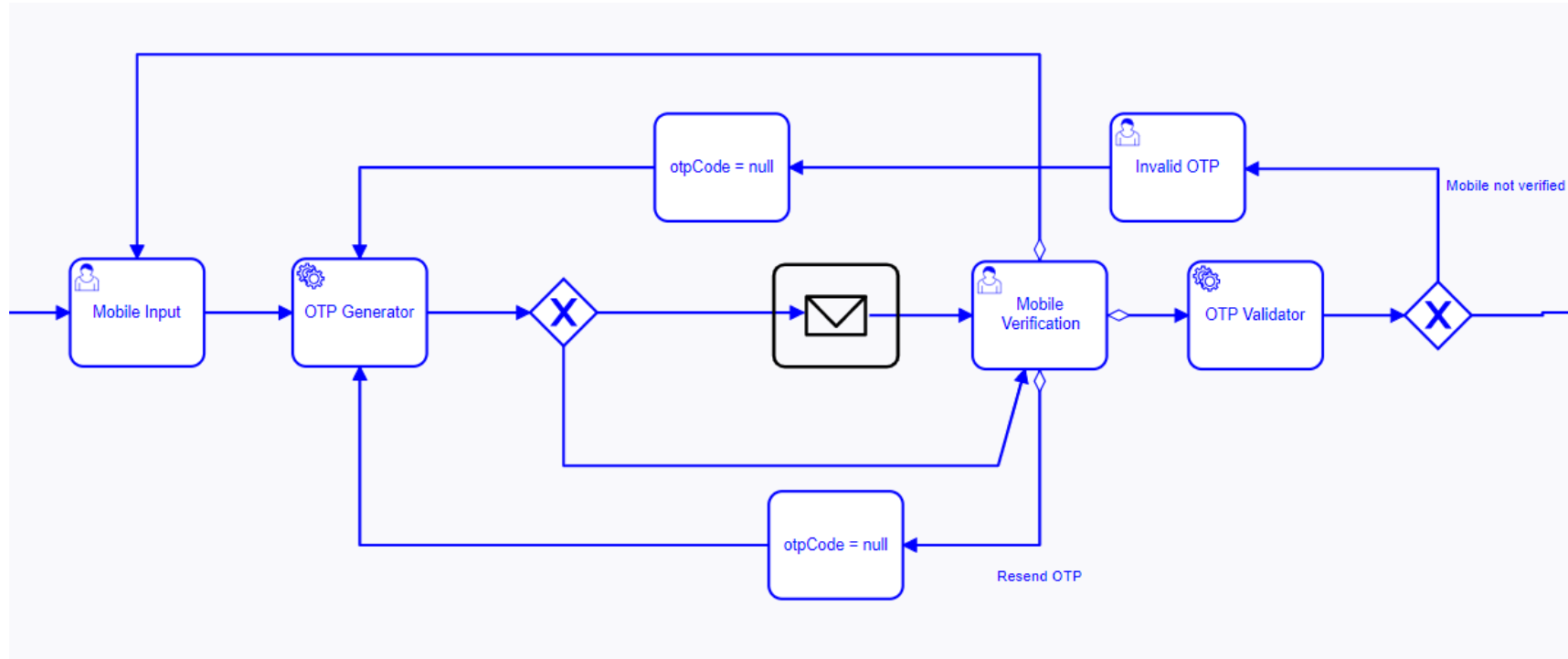


Registration Platform

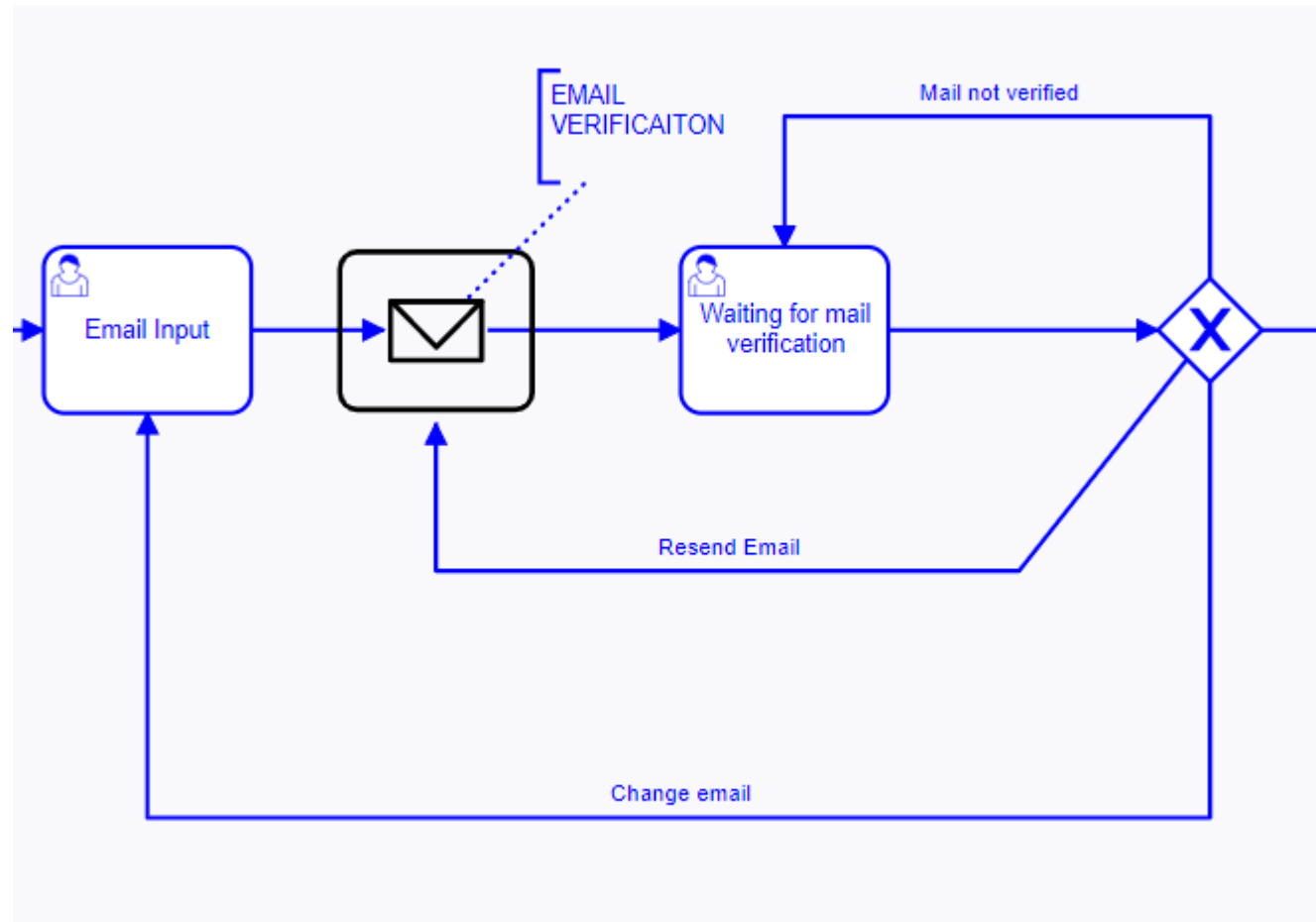
- ▶ BPMN (Business process model and Notation)



Registration Platform





Registration Platform





Summary

 Prospect

 PRAXIA UAT FLOW

 17799f5c-e369-4ab6-b99f-5ce369eab62e

 In-progress(Mobile )

 Omnia

Current Step: Introducing Term Deposit Axia

Step name: *(Intro3)*

04/12/2019 15:24:09

(Mobile )

No data provided

Step: Introducing Term Deposit Axia

Step name: *(Intro2)*

04/12/2019 15:24:08

(Mobile )

No data provided

Step: Introducing Term Deposit Axia

Step name: *(Intro1)*

04/12/2019 15:24:07

(Mobile )

processDefinition	Uat_flow
dataCorrelationId	4c511de1-868e-4182-b5b0-50337a7ea728

Step: Start

Step name: *(Start)*

04/12/2019 15:24:02

processDefinition	Uat_flow
dataCorrelationId	4c511de1-868e-4182-b5b0-50337a7ea728
Journey	PRAXIA UAT FLOW
locale	en
termDepositCalculator	<ul style="list-style-type: none">term: 12MprincipalAmount: 456

Registration Platform - process monitor

Video Solution

- ▶ Spring boot application
- ▶ Integration with Genesys
- ▶ Take snapshots and upload it to document management system
- ▶ Agent can see the customer's journey



Αλλαγή κάμερας



Άνοιγμα φακού



Φωτογράφιση εγγράφου

Φωτογράφιση εγγράφου



Τύπος εγγράφου

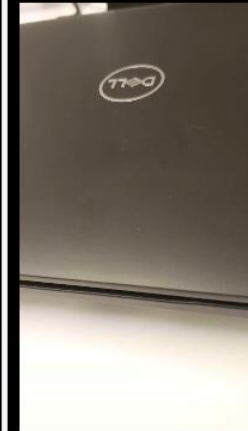
Αναζήτηση...

- δελτίο αστυνομικής ταυτότητας
- διαβατήριο
- εκκαθαριστικό [πραξη διοικητικού προσδιορισμού φορου]
- επαγγελματική ταυτότητα
- καρτα ανεργιας
- φωτογραφια προσωπου

[Περισσότερα...](#)



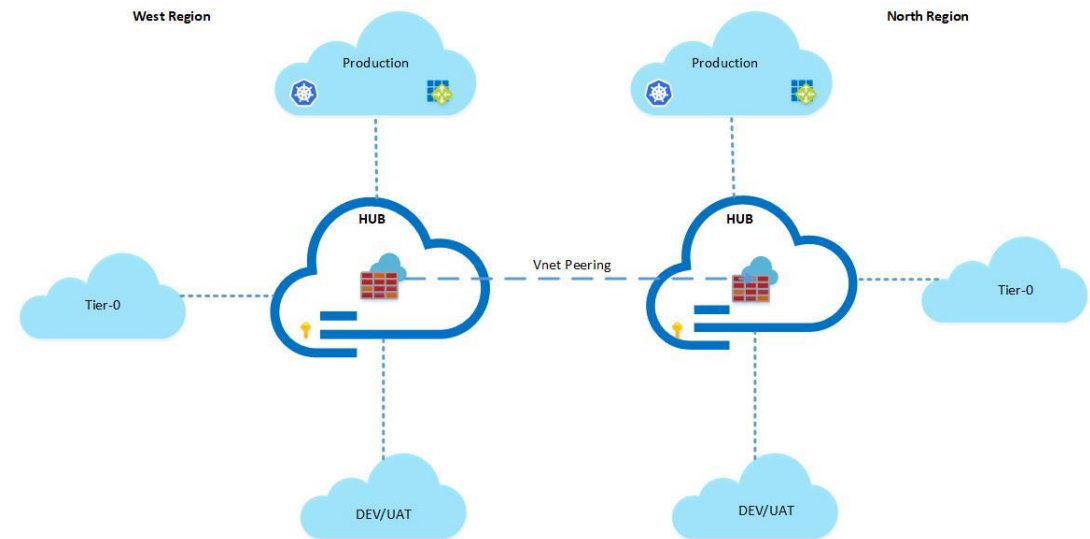
Βιντεοκλήση



Κλείσιμο γ

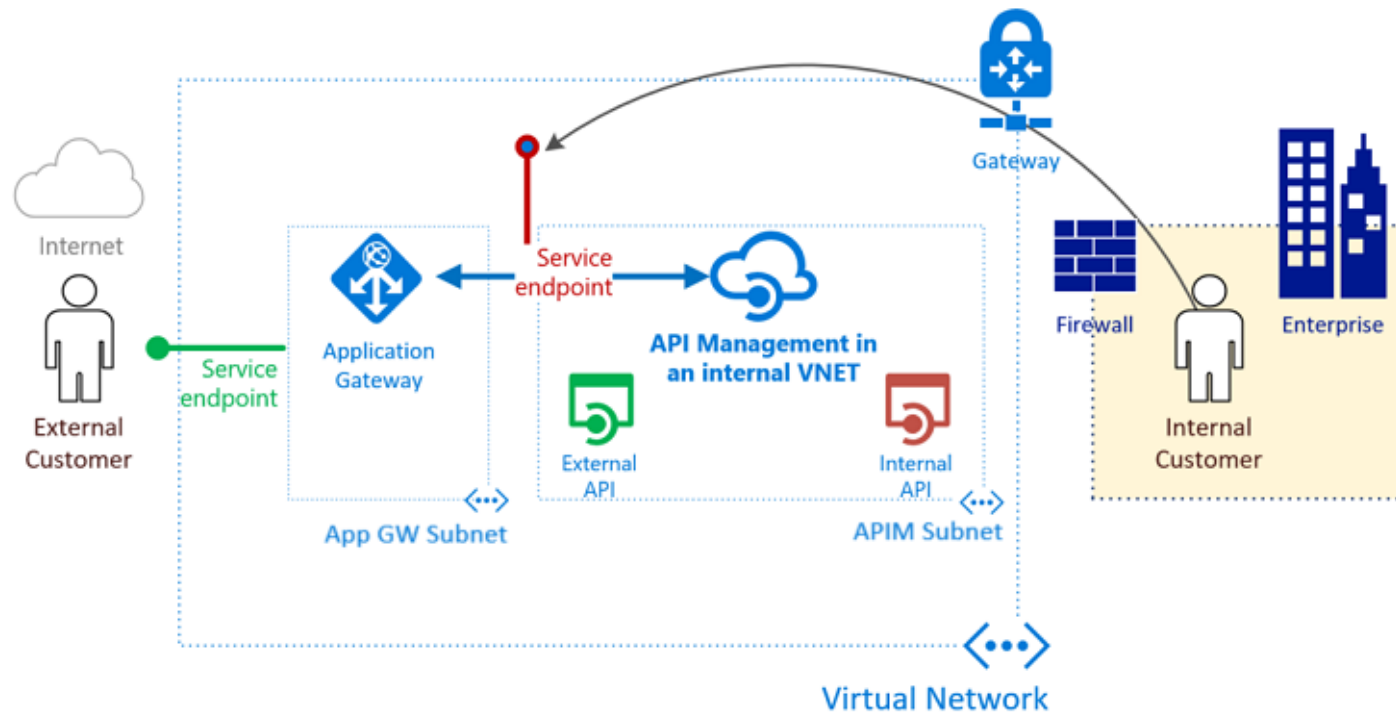
Cloud Infrastructure

- ▶ Hub and Spoke Architecture on 2 regions
- ▶ Multi-subnet virtual networks
- ▶ Hub is the entry point for our cloud services
- ▶ Tier 0 Subscription for core services (DC - PKI)
- ▶ Production Subscription (Web - APP - Database)
- ▶ Dev Subscription
- ▶ Microservices implementation on cloud



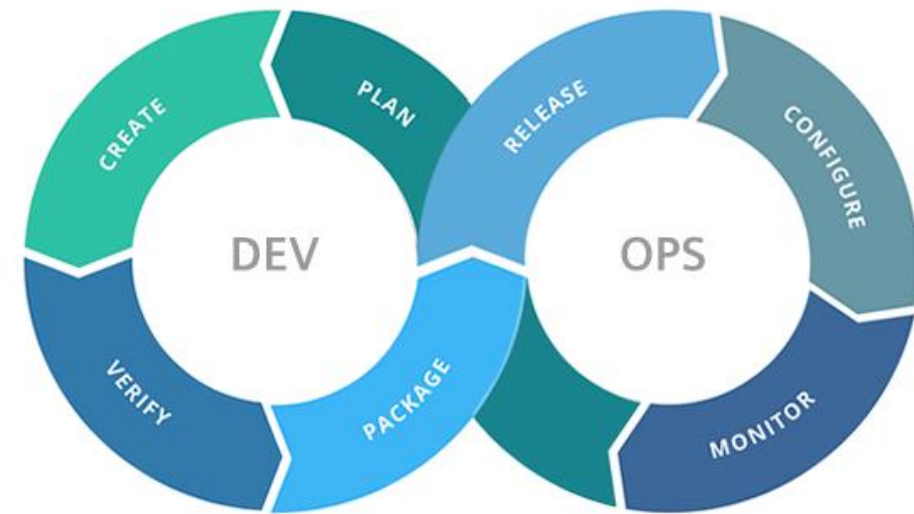
Cloud API Manager

- ▶ APIs are exposed via Cloud APIM



Release Management

- ▶ We managed to decrease the deployment time from hours to minutes!!
- ▶ Jenkins - Git - Ansible and more
- ▶ We are working to automate QA Tests especially in Mobile APP Releases



Release Process - Monolithic Applications

- ▶ Jenkins - Ansible
- ▶ Disable nodes in Load balancer
- ▶ Start deployment on disabled nodes
- ▶ Validation Checks

Release Process - *Microservices*

- ▶ Jenkins
- ▶ Rolling updates
- ▶ Copy configuration files to config server
- ▶ Update images

Monitoring

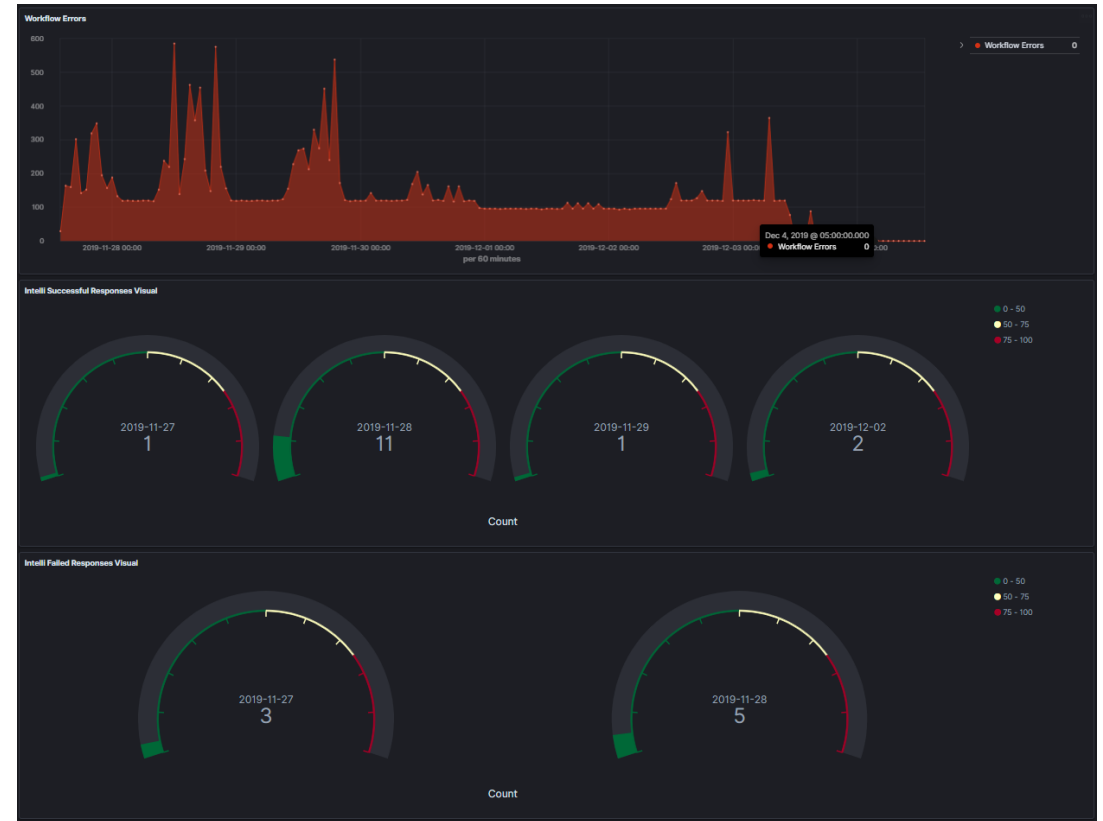
- ▶ ELK - Check_MK for application monitoring
- ▶ Nagios for network and system
- ▶ Custom dashboards
- ▶ Exceptional Logging for mobile apps

Monitoring - Business Intelligence

- ▶ API Calls validation
- ▶ API response time calculation
- ▶ Business impact analysis

Dashboard

- ▶ OCR Responses
- ▶ BPMN Generic Errors



Monitoring - NOC team

- ▶ 24/7
- ▶ Think and act proactively
- ▶ Monitor network - systems and applications

