Jenkins

Amsterdam Jenkins Area Meetup - JAMsterdam

AGENDA

17.00 - 17.30 - Doors open

17.30 - 18.30 - Pizza’s

18.30 - 18.45 - Short intro MeetUp group / Welcome

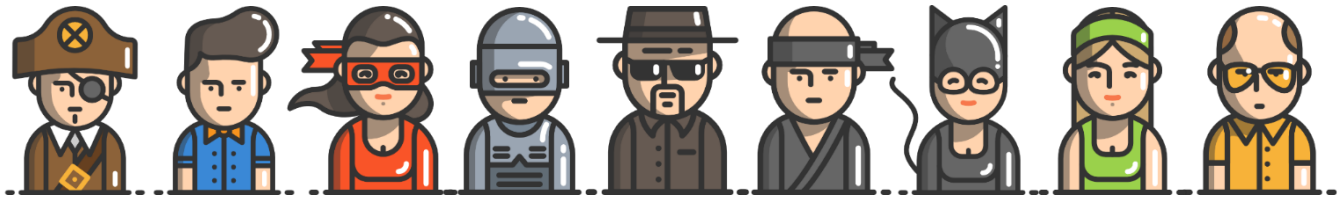
18.45 - 19.30 - Session 1: Allan Selvan

19.30 - 19.45 - Break

19.45 - 20.45 - Session 2: Cojan van Ballegooijen

20.45 - 21.30 - Drinks & networking

History – ABN AMRO TechX



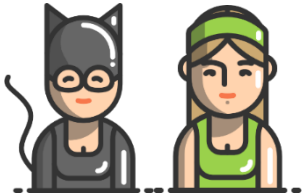
ABN AMRO Innovation Circle started in December 2018
with the first Meetup with Java Champion Nicolai Parlog

Our goal, share once a month knowledge in a MeetUp

History – ABN AMRO TechX

Patrick Deepa

Eddy



Varvara Gloria

Your hosts for tonight

ABN·AMRO

Jenkins

Coming Events – ABN AMRO TechX

xx AUGUST

Speaker: Roy Wasse – OpenValue
Topic: Blockchain

02 SEPTEMBER

Speaker: Joris Kuipers – CTO TriFork
Topic: SpringBoot, the do’s and dont’s

15 OCTOBER

Speaker: Thiago de Fario – LinkIT
Topic: DevOps

WE ARE HIRING !!!!

Full Stack Developer - Data

Amsterdam, Noord-Holland, Netherlands Plaatsingsdatum: 02-07-2019

At a glance Do you want to bring banking as we know it to the next level and be part of the biggest digital revolution in history? Do you have a strong understanding of Data and its quality ...

Bekijk deze vacature ›

Integration Platform SRE

Amsterdam, Noord-Holland, Nederland Plaatsingsdatum: 01-07-2019

Jouw baan Als Site Reliability Engineer werk je samen met andere developers in een scrum team aan een 24x7 stabiele- en betrouwbare API-infrastructuur. De platformen beschikbaar houden voor onze ...

Bekijk deze vacature ›

API Support Manager

Amsterdam, Noord-Holland, Nederland Plaatsingsdatum: 01-07-2019

Als Support manager, ben jij verantwoordelijk voor het analyseren, ontwikkelen, neerzetten en onderhouden van de support processen rond om API's binnen onze organisatie. Dit zijn zowel onz...

Check our website at
https://www.abnamro.com/nl/carriere/vacatures

ABN·AMRO

CICD at ABN Amro using Jenkins

TechX (AAB) and Jenkins Area Meetup (JAM)

Allan Tony Selvan

About me

Allan Tony Selvan

Senior IT Development Engineer

ABN Amro Bank

Financial sector
Enterprising bank

Amsterdam
Headquarter

Agile Organization

20,000
Total number of employees

400+
Agile Team

2,000+
Applications

The SOLO Team

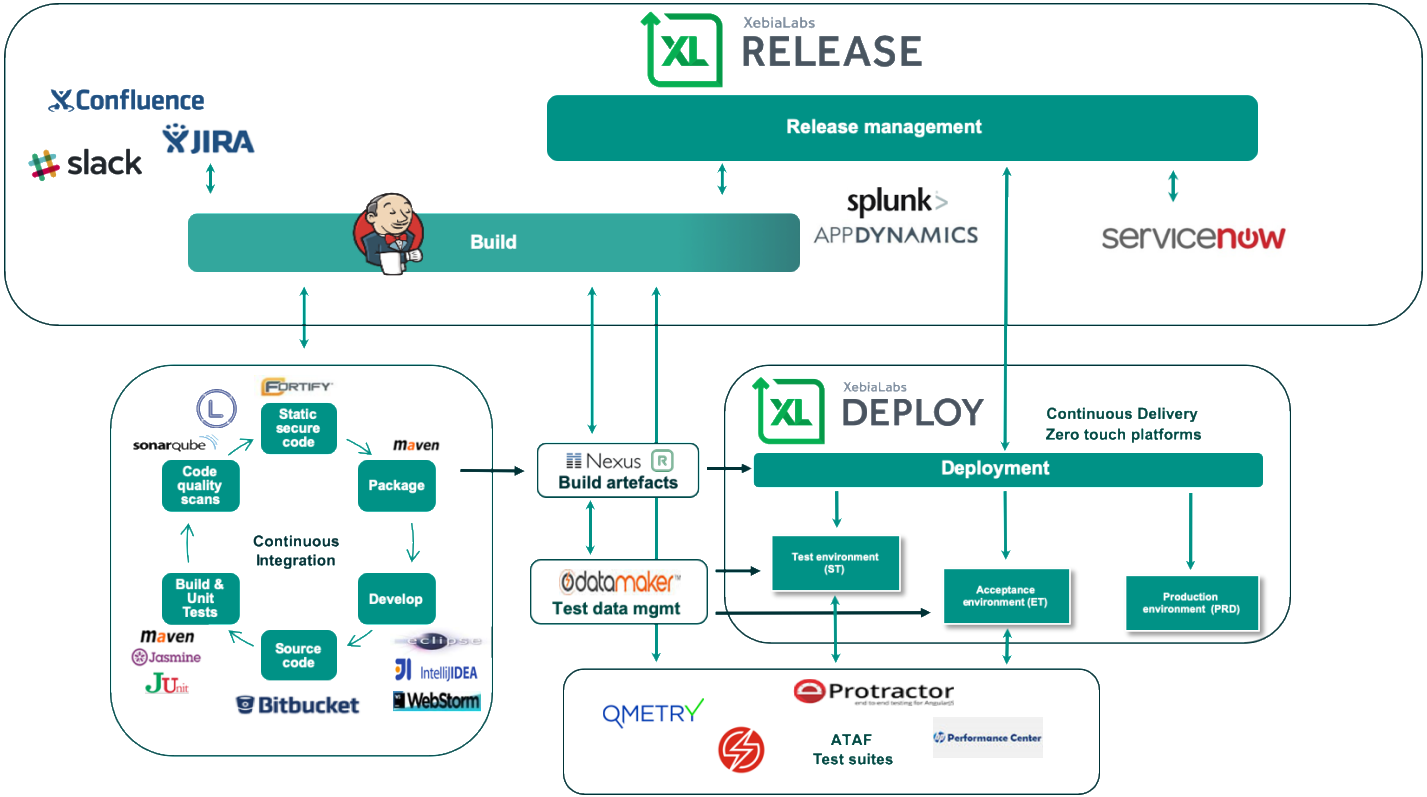
SOLO – Software logistics

Agile Team:
6 Developers

Responsible for:

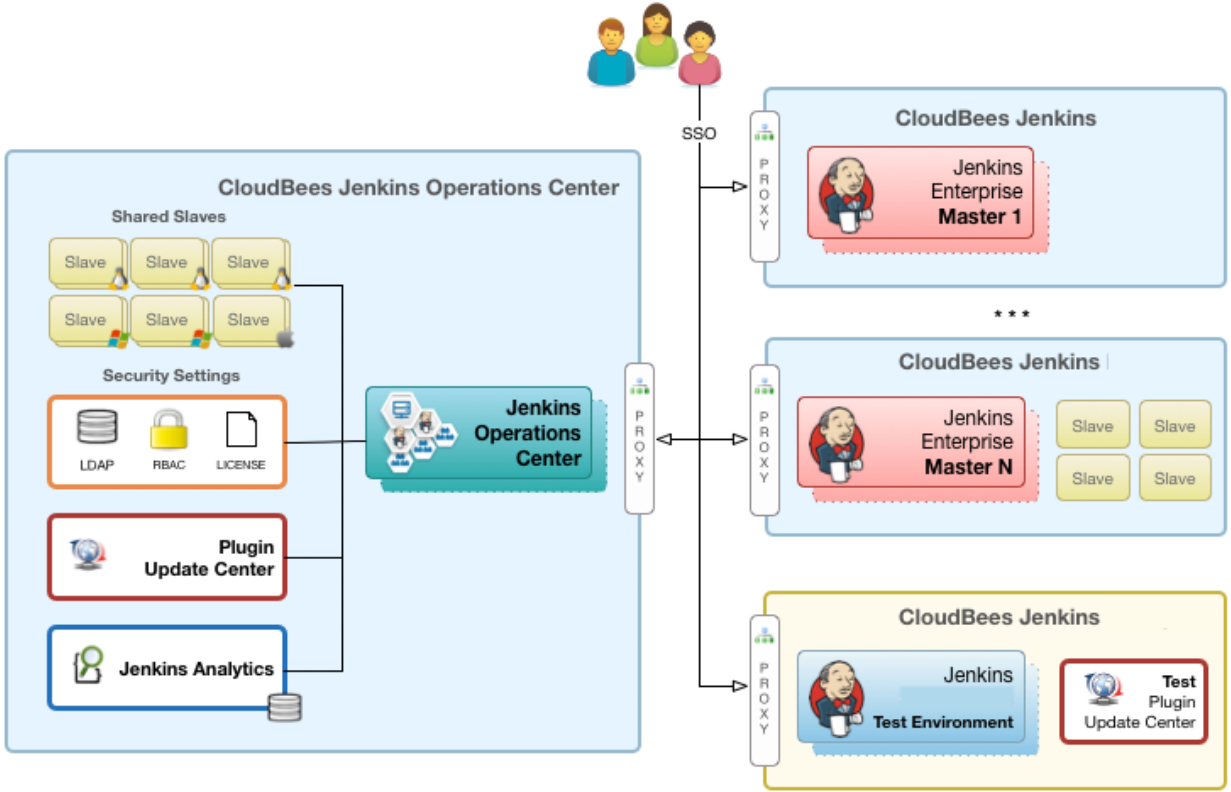
Maintenance, Availability and Support

CICD Landscape at AAB



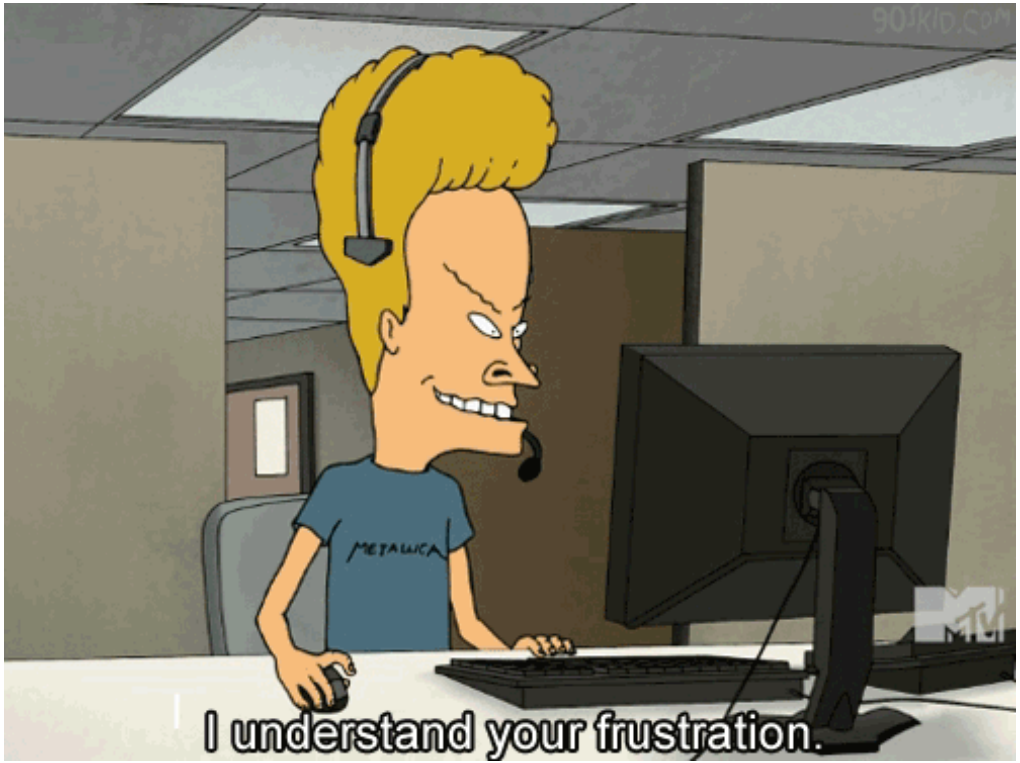
Our Journey with Jenkins - Begins!

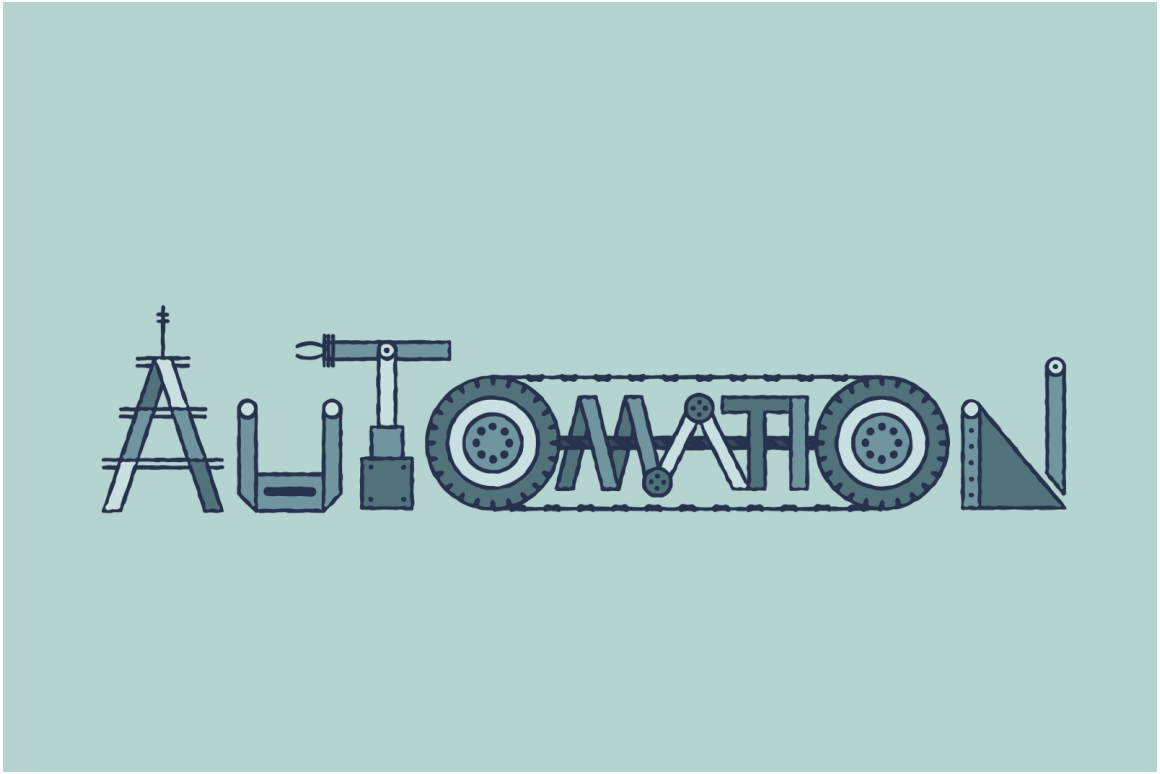
Cloudbees Jenkins Platform



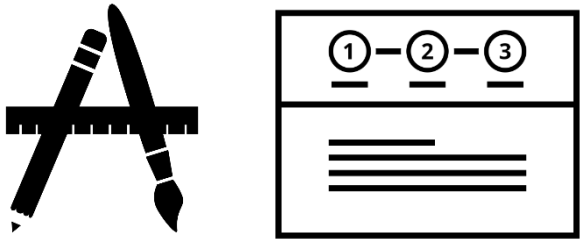
Our Journey with Jenkins – Continues

NBC


I understand your frustration.

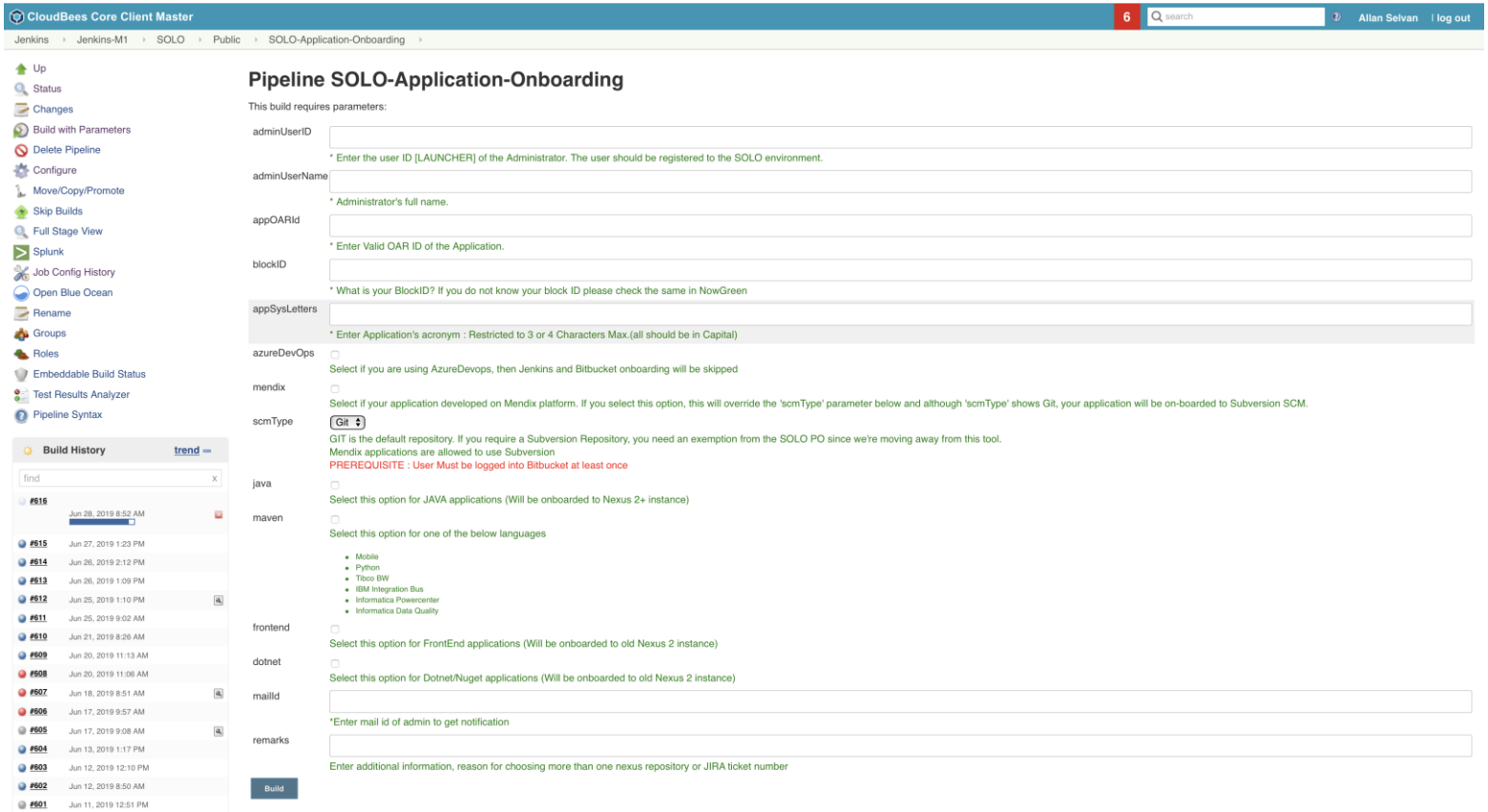

AUTOMATION

Our Plan – In Action

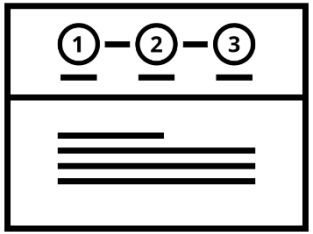


Application Onboarding Process

Application Onboarding process



Our Plan – In Action



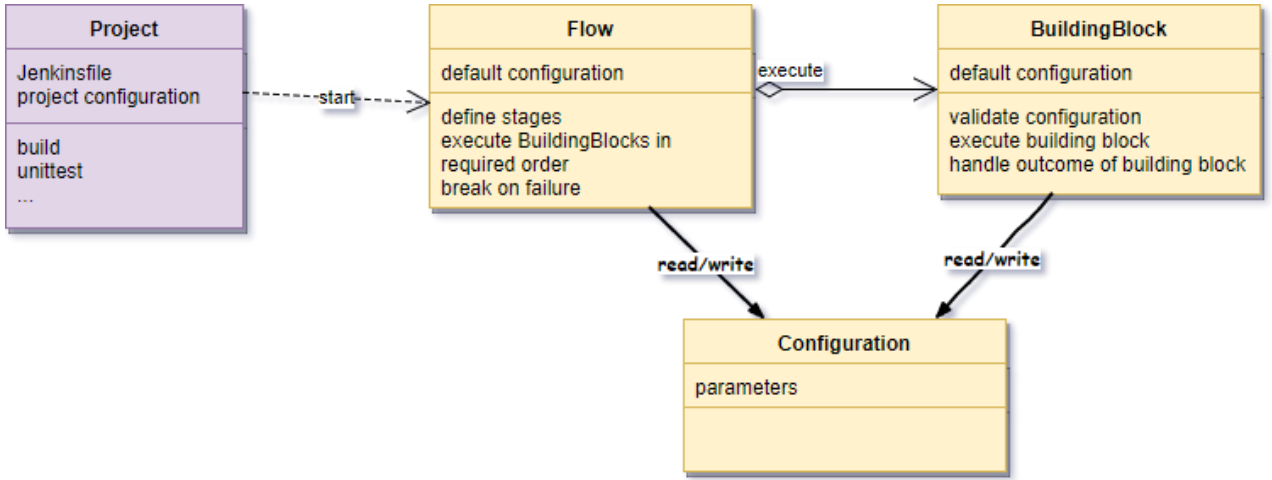
Application Onboarding Process

Standard Pipelines

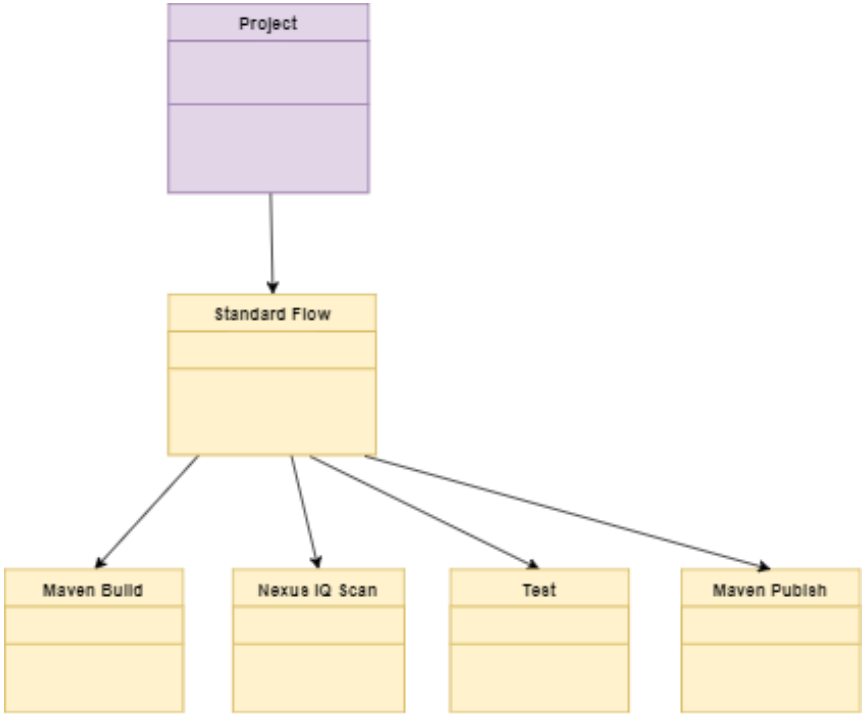
A Standard Pipeline for Most of the languages used in AAB

Go

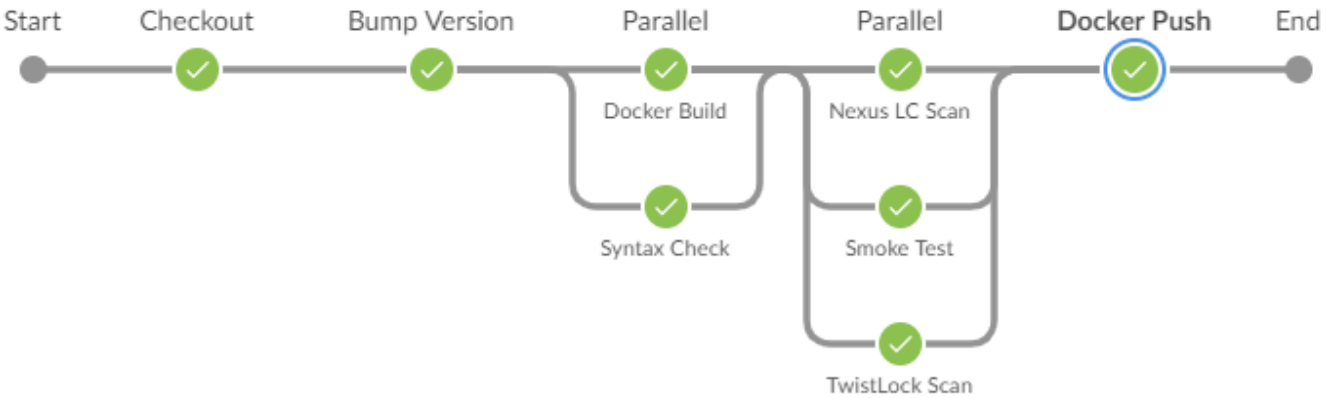
Standard pipelines at AAB



Standard Flows

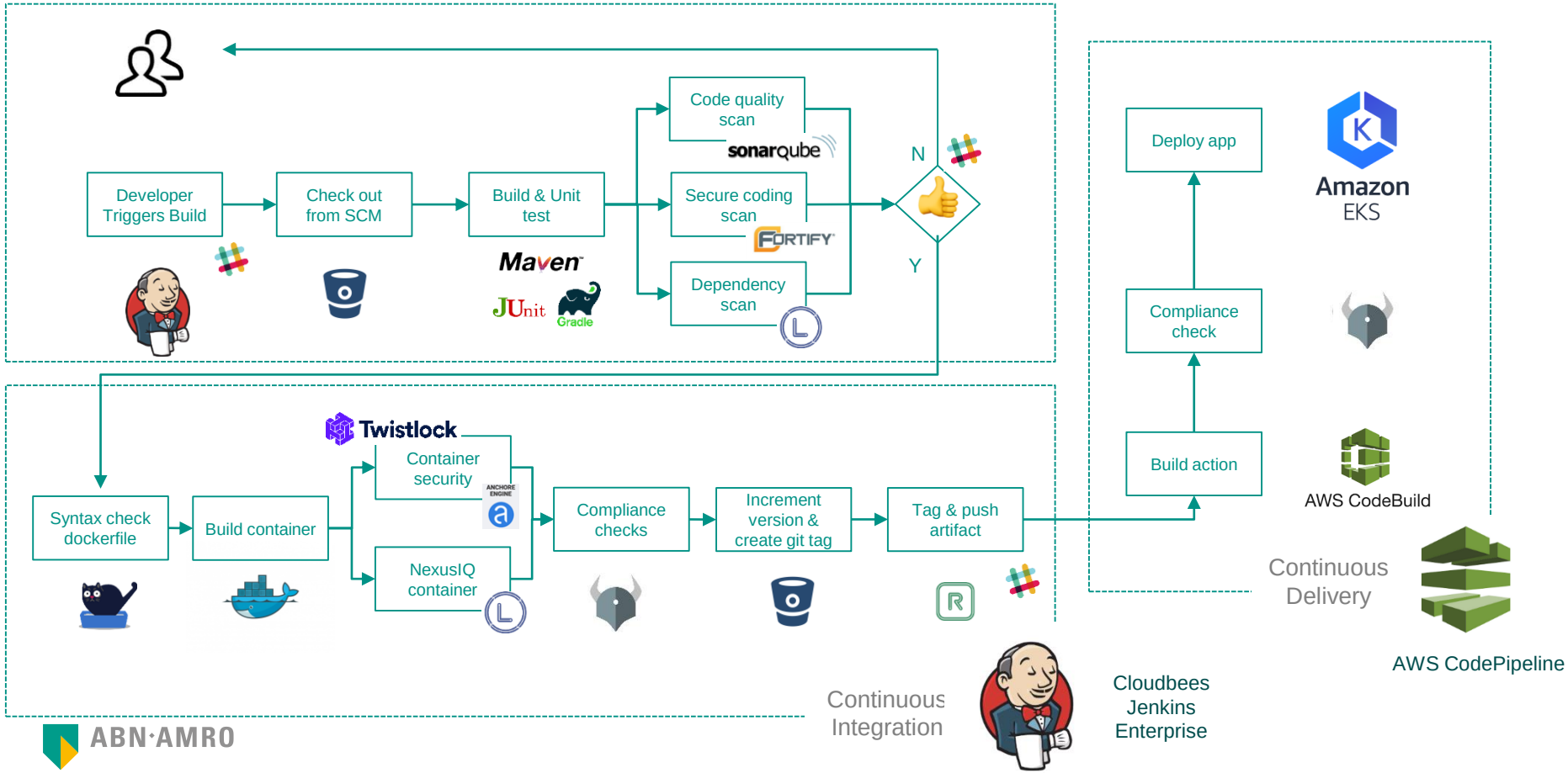


Docker Image Pipeline

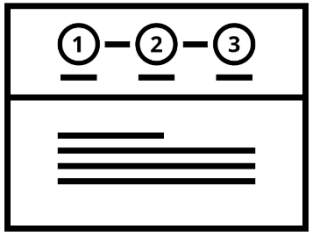



```
@Library(['stpl-docker-image', 'stpl-buildingblocks']) _

def projectConfig = [dockerImageName                    : 'aab-build-maven',
                     dockerImageTags                    : '3.6.0-jdk-8, 3.6-jdk-8, 3-jdk-8',
                     dockerSmokeTestCommandGiven        : 'mvn -version',
                     dockerSmokeTestCommandOutputExpected: 'Apache Maven 3.6.0',
                     applicationBaseVersion             : 'v1.16',
                     applicationDescription             : 'AAB provided image for executing maven
commands',
                     nexusLCDockerApplicationId         : 'SPEX_spex.spex-docker-image'
]

dockerImageSTPL(projectConfig)
```

Standard Pipeline Dockerized

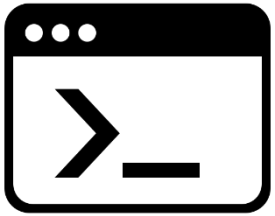


Our Plan – In Action



Application Onboarding Process

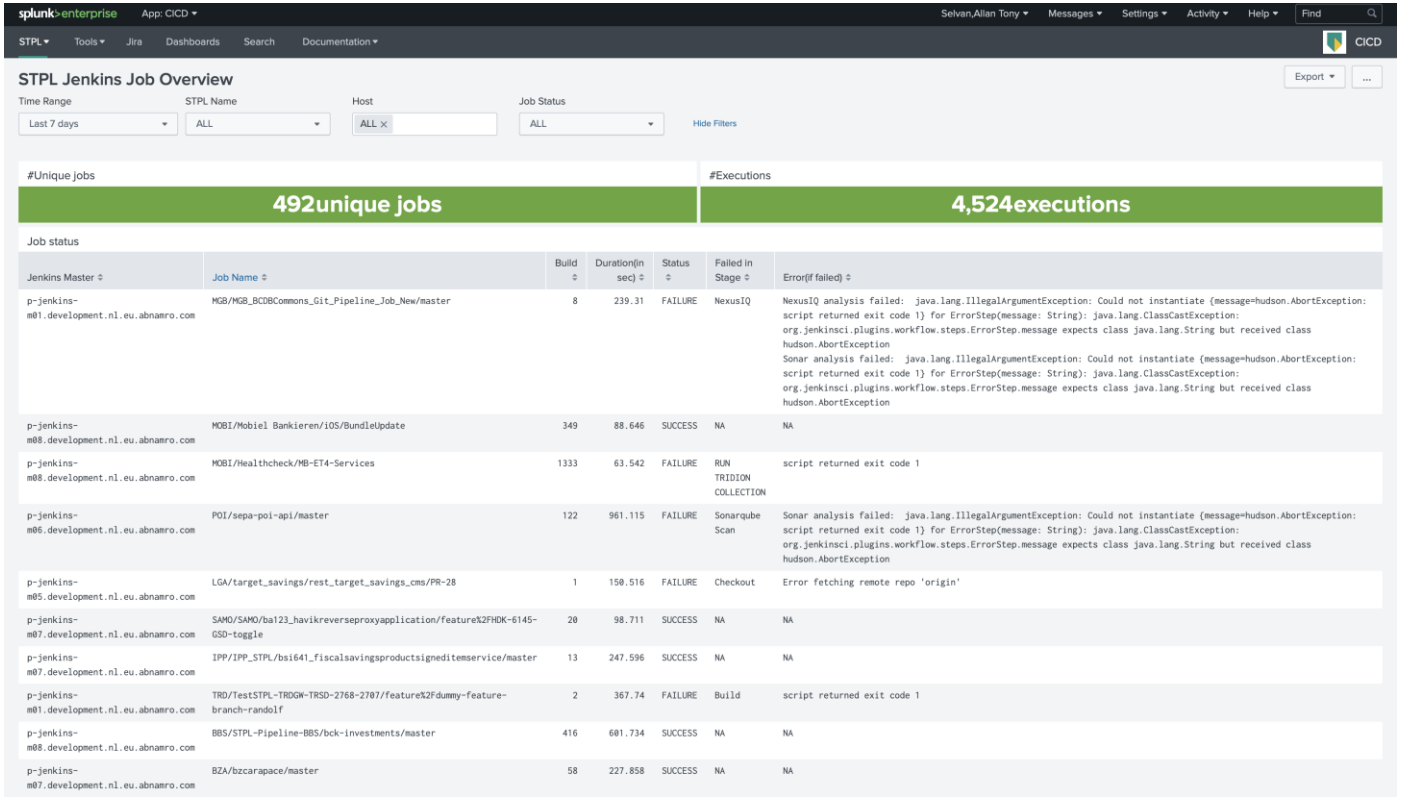
splunk>



Inhouse Jenkins CLI

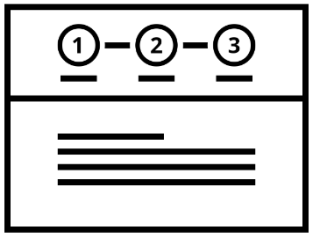
Standard Pipelines

Splunk for Analytics



Jenkins Master	Job Name	Build	Duration(in sec)	Status	Failed in Stage	Error(if failed)
p-jenkins-m01.development.nl.eu.abnamro.com	MGB/MGB_BCDBCommons_Git_Pipeline_Job_New/master	8	239.31	FAILURE	NexusIQ	NexusIQ analysis failed: java.lang.IllegalArgumentException: Could not instantiate {message=hudson.AbortException: script returned exit code 1} for ErrorStep(message: String): java.lang.ClassCastException: org.jenkinsci.plugins.workflow.steps.ErrorStep.message expects class java.lang.String but received class hudson.AbortException Sonar analysis failed: java.lang.IllegalArgumentException: Could not instantiate {message=hudson.AbortException: script returned exit code 1} for ErrorStep(message: String): java.lang.ClassCastException: org.jenkinsci.plugins.workflow.steps.ErrorStep.message expects class java.lang.String but received class hudson.AbortException
p-jenkins-m08.development.nl.eu.abnamro.com	MOBI/Mobiel Bankieren/iOS/BundleUpdate	349	88.646	SUCCESS	NA	NA
p-jenkins-m08.development.nl.eu.abnamro.com	MOBI/Healthcheck/MB-ET4-Services	1333	63.542	FAILURE	RUN TRIDION COLLECTION	script returned exit code 1
p-jenkins-m06.development.nl.eu.abnamro.com	POI/sepa-poi-api/master	122	961.115	FAILURE	Sonarqube Scan	Sonar analysis failed: java.lang.IllegalArgumentException: Could not instantiate {message=hudson.AbortException: script returned exit code 1} for ErrorStep(message: String): java.lang.ClassCastException: org.jenkinsci.plugins.workflow.steps.ErrorStep.message expects class java.lang.String but received class hudson.AbortException
p-jenkins-m05.development.nl.eu.abnamro.com	LGA/target_savings/rest_target_savings_cms/PR-28	1	150.516	FAILURE	Checkout	Error fetching remote repo 'origin'
p-jenkins-m07.development.nl.eu.abnamro.com	SAMO/SAMO/ba123_havikreverseproxyapplication/feature%2FHDK-6145-GSD-toggle	20	98.711	SUCCESS	NA	NA
p-jenkins-m07.development.nl.eu.abnamro.com	IPP/IPP_STPL/bsi641_fiscalsavingsproductsigneditemservice/master	13	247.596	SUCCESS	NA	NA
p-jenkins-m01.development.nl.eu.abnamro.com	TRD/TestSTPL-TRDGW-TRSD-2768-2707/feature%2Fdummy-feature-branch-randolf	2	367.74	FAILURE	Build	script returned exit code 1
p-jenkins-m08.development.nl.eu.abnamro.com	BBS/STPL-Pipeline-BBS/bck-investments/master	416	601.734	SUCCESS	NA	NA
p-jenkins-m07.development.nl.eu.abnamro.com	BZA/bzcarapace/master	58	227.858	SUCCESS	NA	NA

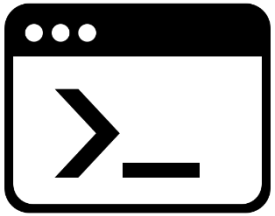
Our Plan – In Action



Application Onboarding Process

APPDYNAMICS

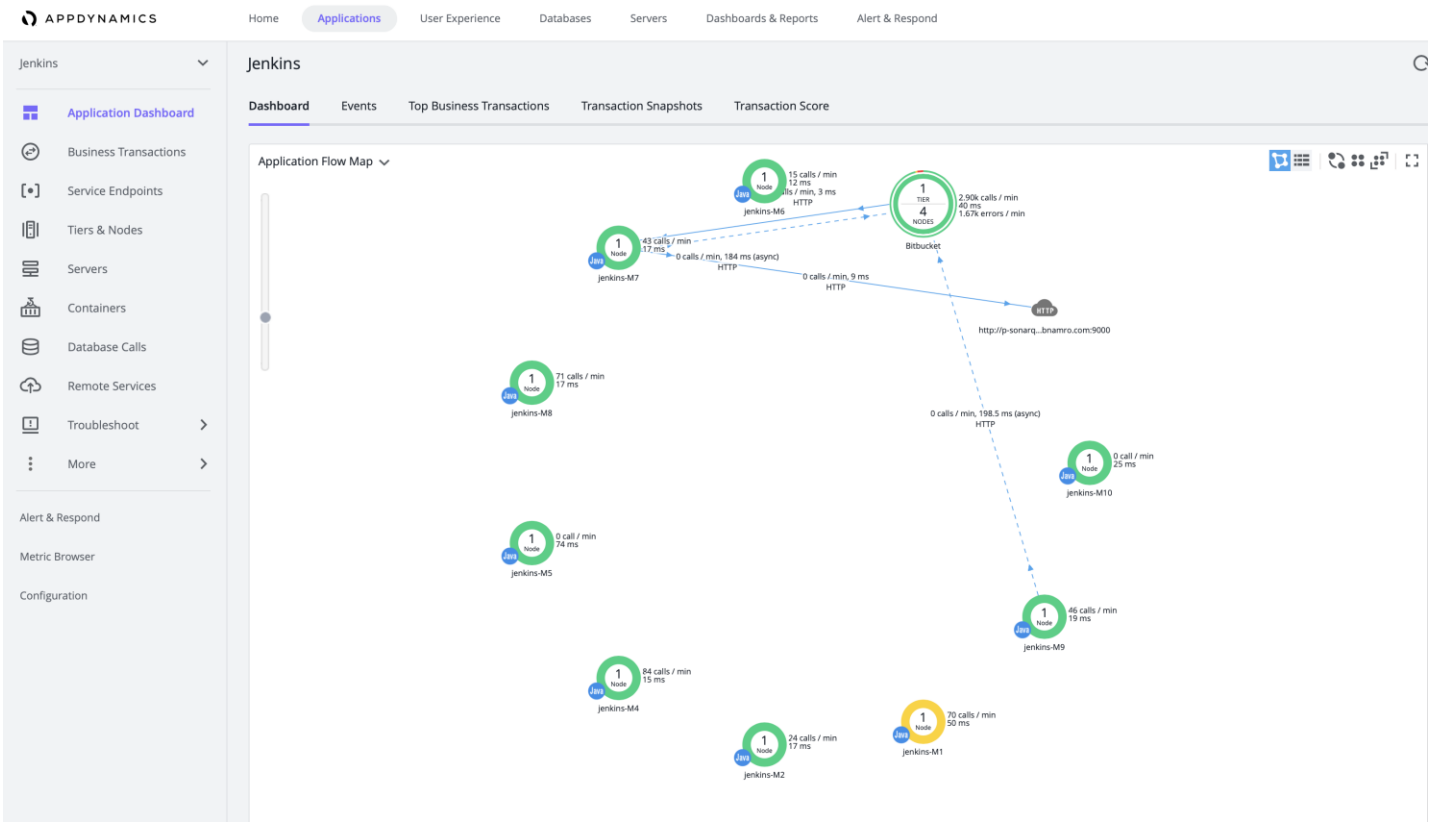
splunk>



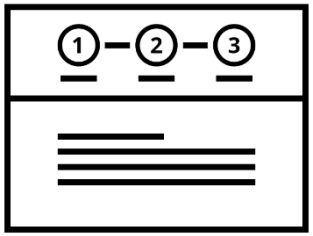
Inhouse Jenkins CLI

Standard Pipelines

Appdynamics for Monitoring Jenkins



Our Plan – In Action

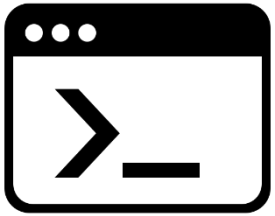


APPDYNAMICS

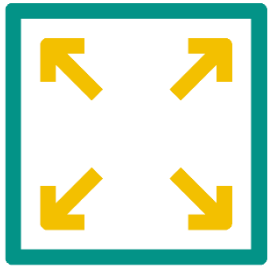
1000+ Applications

Application Onboarding Process

splunk>



Inhouse Jenkins CLI



10 Masters
x2 Build Capacity

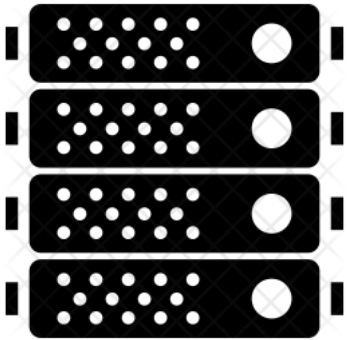
ANSIBLE

Standard Pipelines

Our Journey with Jenkins – Continues

Required Change to scale further

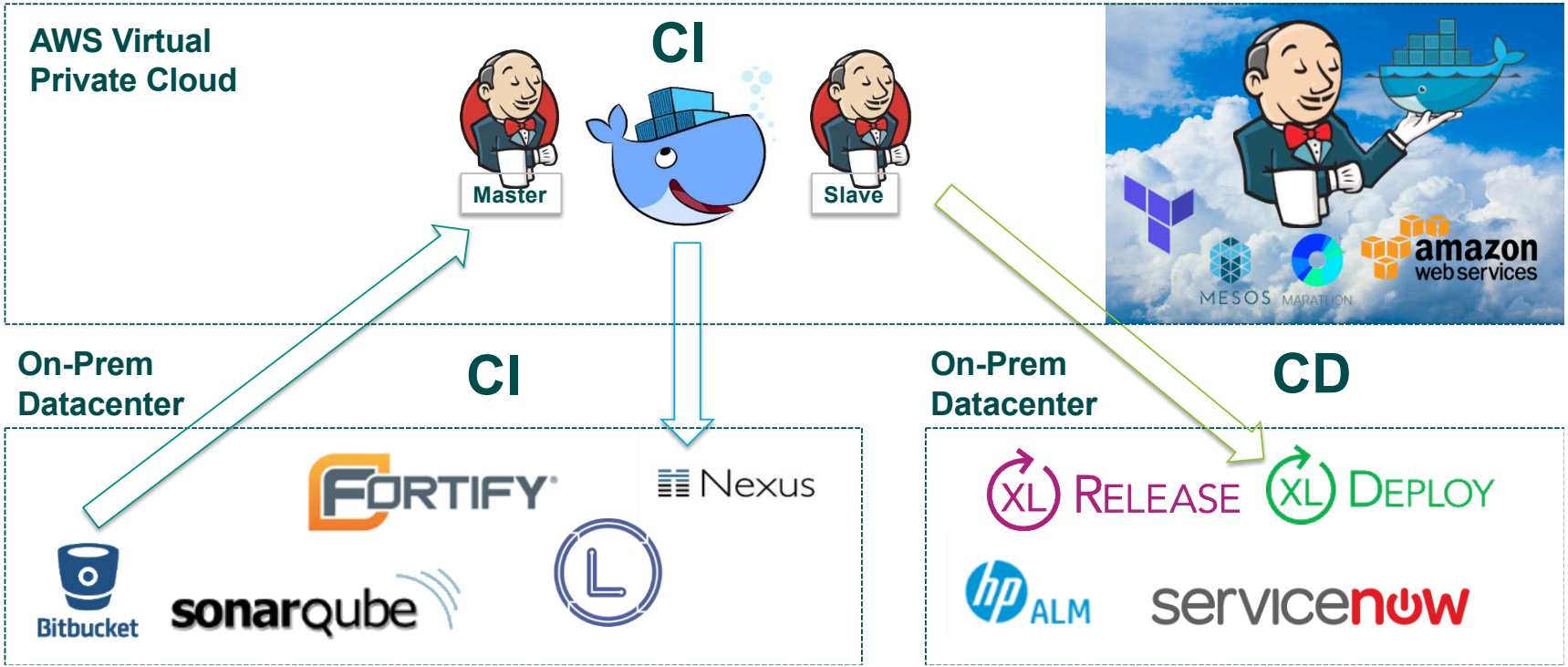
From	To
• Fully Centralized Maintenance	• Decentralized Maintenance
• Manual Scaling	• Automated Scaling
• Conflict in Tools and Configuration	• Reduced Conflicts in Tools and Configuration
• Limited Team Autonomy	• Increased Team Autonomy



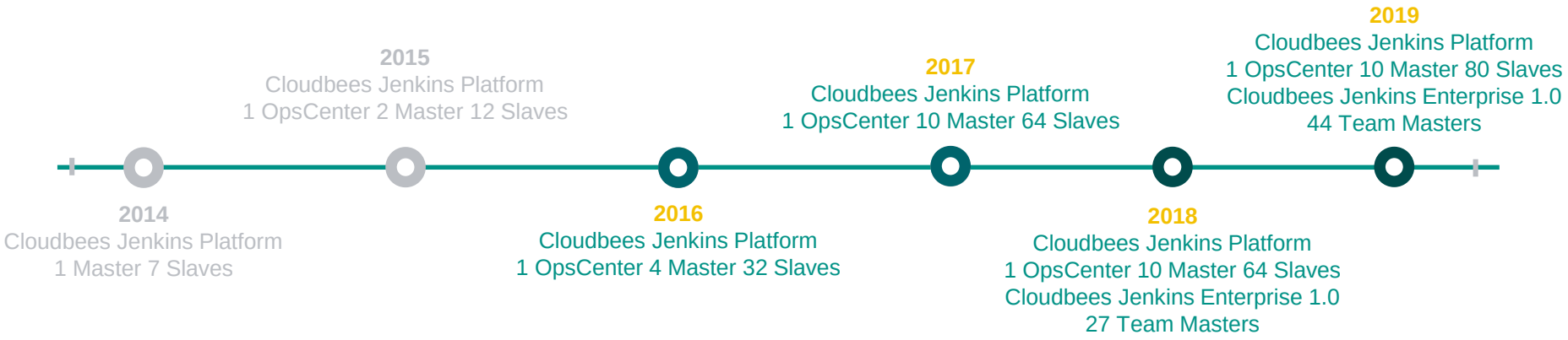
Static VMs

Docker Containers

Cloudbees Jenkins Enterprise 1.0



Our Journey with Jenkins – Timeline



Cloudbees DevOps Scalability Achievement

DevOps Scalability Achievement Award **-** Presented to the organization demonstrating the most outstanding highly-scaled continuous delivery and DevOps implementation across a team or organization with the use of CloudBees solutions, including generation of quantifiable business value.
Winner: ABN AMRO

Celebration of Winning the Award ☺

What's Next?

- Cloudbees Jenkins Enterprise 2.0
- Migrate from CJE 1.0 to CJE 2.0
- Migrate from CJP to CJE
- More Automation

Learnings

Start small
Don’t be afraid to fail
Find a balance between Dev and Ops
Automation
Never stop Learning
Start small and take incremental steps forward
Learn from you failures and build more awesome stuff
This is very important as the one affects the other
Automate as much as you can. Remember – Its never to late to Automate
You need to continuously learn in order to keep up

Thank you!

Session 2 – Cojan van Ballegooijen [CloudBees]

More and more teams are deploying cloud native applications on Kubernetes, placing new demands on engineers who want to deploy and test easily during their development workflow.

In this talk we'll explain the CI/CD challenges in a cloud native landscape, and show how Jenkins X rises to them by leveraging open source cloud native technologies.

We'll demo a GitOps based Jenkins X workflow, showing how simple Jenkins X makes it for developers to stage and deploy changes on demand.

Meetup

LET'S HAVE A

ABN·AMRO

Meetup

Free Drinks

ABN·AMRO

Jenkins