

# Meetup TECH X

POWERED BY



ABN-AMRO



Jenkins

Amsterdam Jenkins Area Meetup - JAMsterdam

# AGENDA

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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

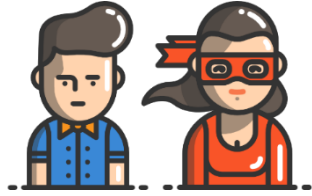
20.45 - 21.30 - Drinks & networking

# History – ABN AMRO TechX



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

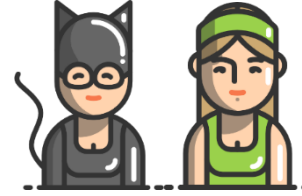
Our goal, share once a month knowledge in a MeetUp



Patrick    Deepa



Eddy



Varvara    Gloria

## Your hosts for tonight

# 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 don'ts



**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>

# CICD at ABN Amro using Jenkins

TechX (AAB) and Jenkins Area Meetup (JAM)

Allan Tony Selvan

## About me

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**Allan Tony Selvan**  
Senior IT Development Engineer



## Financial sector

Enterprising bank

**20,000**

Total number of employees

## Amsterdam

Headquarter

**400+**

Agile Team

## Agile Organization

**2,000+**

Applications

# The SOLO Team



SOLO – Software logistics

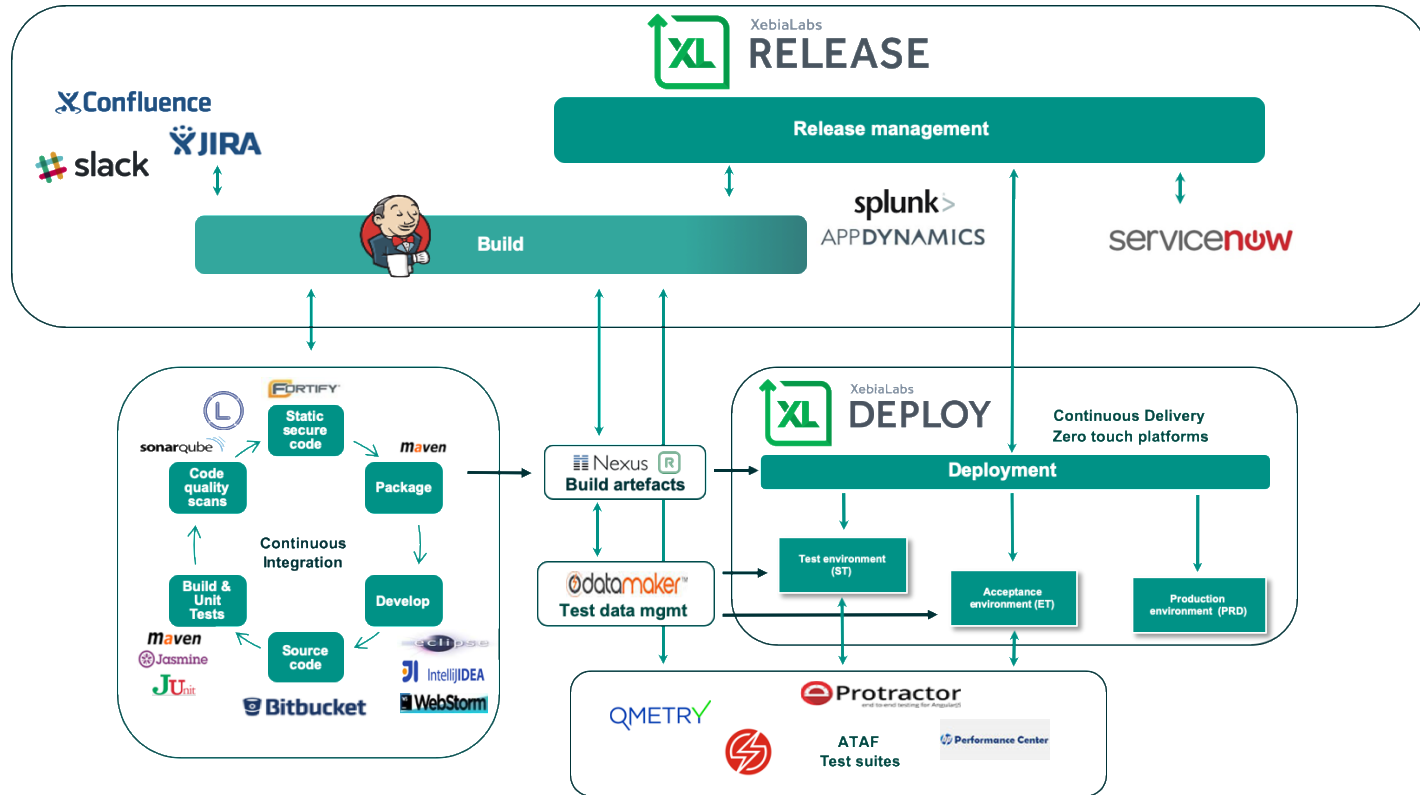
Agile Team:  
6 Developers

Responsible for:



Maintenance, Availability and Support

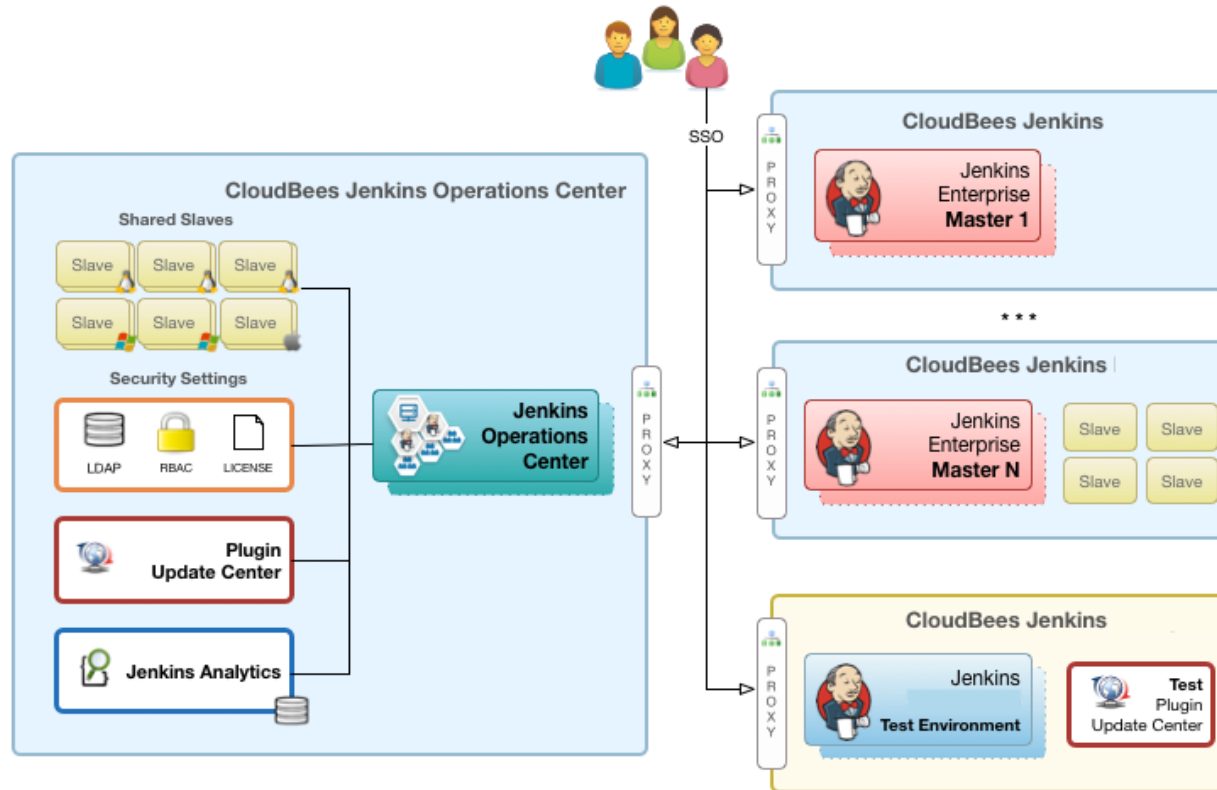
# CICD Landscape at AAB



# Our Journey with Jenkins - Begins!



# Cloudbees Jenkins Platform



# Our Journey with Jenkins – Continues

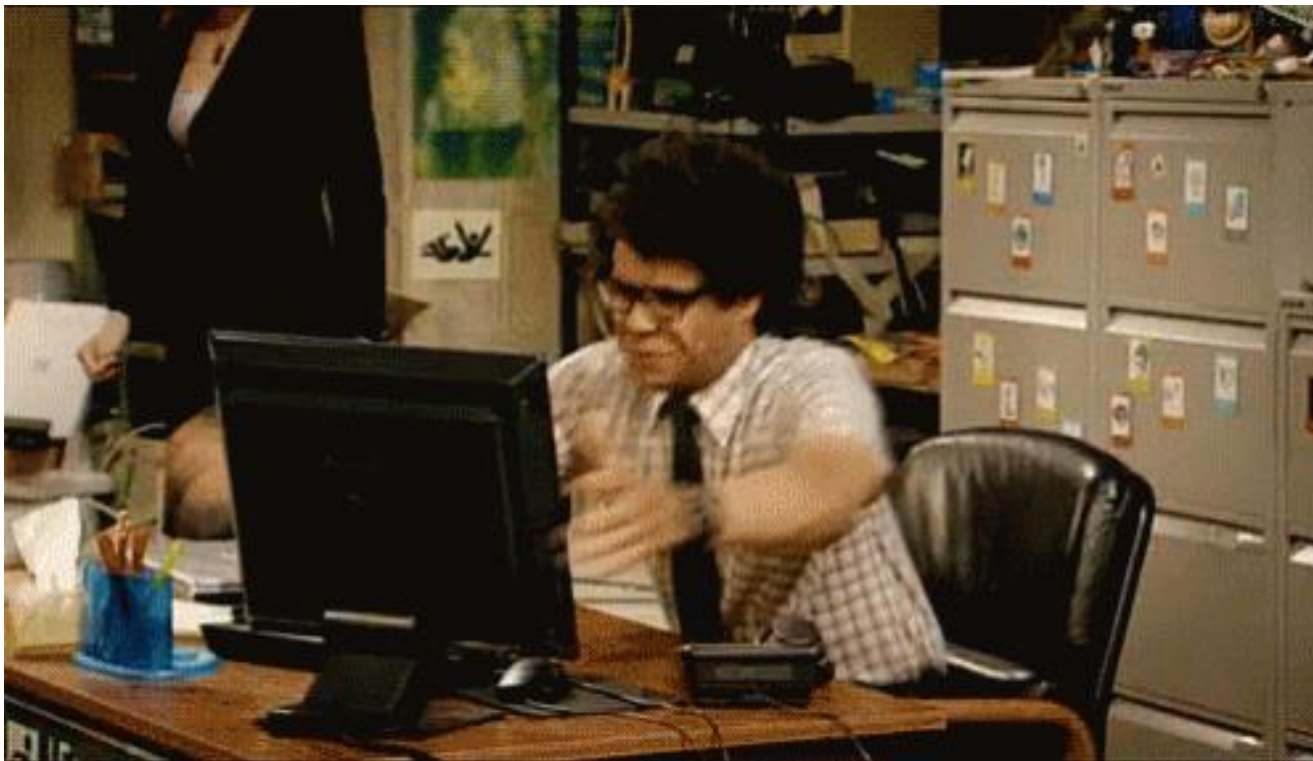












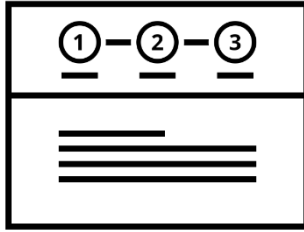








# Our Plan – In Action



Application Onboarding Process

# Application Onboarding process

CloudBees Core Client Master

6

search

Allan Selvan | log out

Jenkins > Jenkins-M1 > SOLO > Public > SOLO-Application-Onboarding >

Up

Status

Changes

Build with Parameters

Delete Pipeline

Configure

Move/Copy/Promote

Skip Builds

Full Stage View

Splunk

Job Config History

Open Blue Ocean

Rename

Groups

Roles

Embeddable Build Status

Test Results Analyzer

Pipeline Syntax

Build History

trend

find

#118 Jun 28, 2019 8:52 AM

#115 Jun 27, 2019 1:23 PM

#114 Jun 26, 2019 2:12 PM

#113 Jun 26, 2019 1:09 PM

#112 Jun 25, 2019 1:10 PM

#111 Jun 25, 2019 9:02 AM

#110 Jun 21, 2019 8:26 AM

#109 Jun 20, 2019 11:13 AM

#108 Jun 20, 2019 11:06 AM

#107 Jun 18, 2019 8:51 AM

#106 Jun 17, 2019 9:57 AM

#105 Jun 17, 2019 9:08 AM

#104 Jun 13, 2019 1:17 PM

#103 Jun 12, 2019 12:10 PM

#102 Jun 12, 2019 8:50 AM

#101 Jun 11, 2019 12:51 PM

## Pipeline SOLO-Application-Onboarding

This build requires parameters:

adminUserID

\* Enter the user ID [LAUNCHER] of the Administrator. The user should be registered to the SOLO environment.

adminUserName

\* Administrator's full name.

appOARID

\* Enter Valid OAR ID of the Application.

blockID

\* What is your BlockID? If you do not know your block ID please check the same in NowGreen

appSysLetters

\* Enter Application's acronym : Restricted to 3 or 4 Characters Max.(all should be in Capital)

azureDevOps

Select if you are using AzureDevOps, then Jenkins and Bitbucket onboarding will be skipped

mendix

Select if your application developed on Mendix platform. If you select this option, this will override the 'scmType' parameter below and although 'scmType' shows Git, your application will be on-boarded to Subversion SCM.

scmType

Git

GIT is the default repository. If you require a Subversion Repository, you need an exemption from the SOLO PO since we're moving away from this tool.  
Mendix applications are allowed to use Subversion  
**PREREQUISITE : User Must be logged into Bitbucket at least once**

java

Select this option for JAVA applications (Will be onboarded to Nexus 2+ instance)

maven

Select this option for one of the below languages

- Mobile
- Python
- TILOS BW
- IBM Integration Bus
- Informatica Powercenter
- Informatica Data Quality

frontend

Select this option for FrontEnd applications (Will be onboarded to old Nexus 2 instance)

dotnet

Select this option for Dotnet/Nuget applications (Will be onboarded to old Nexus 2 instance)

mailId

\*Enter mail id of admin to get notification

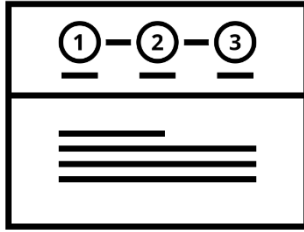
remarks

Enter additional information, reason for choosing more than one nexus repository or JIRA ticket number

Build



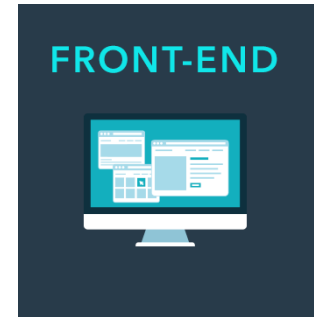
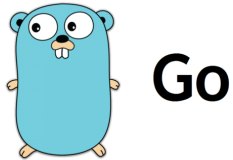
# Our Plan – In Action



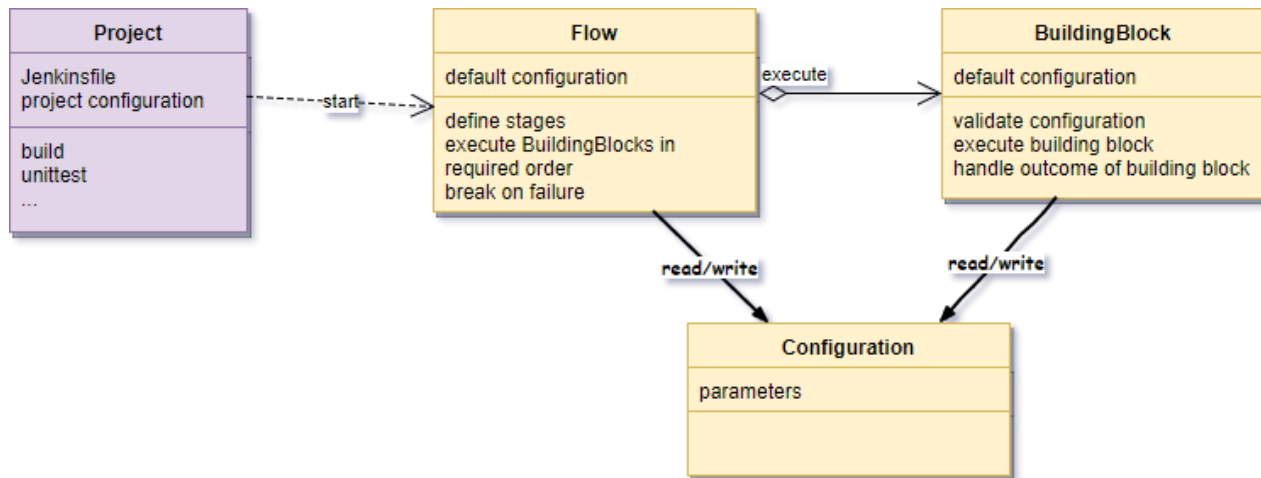
Application Onboarding Process

Standard Pipelines

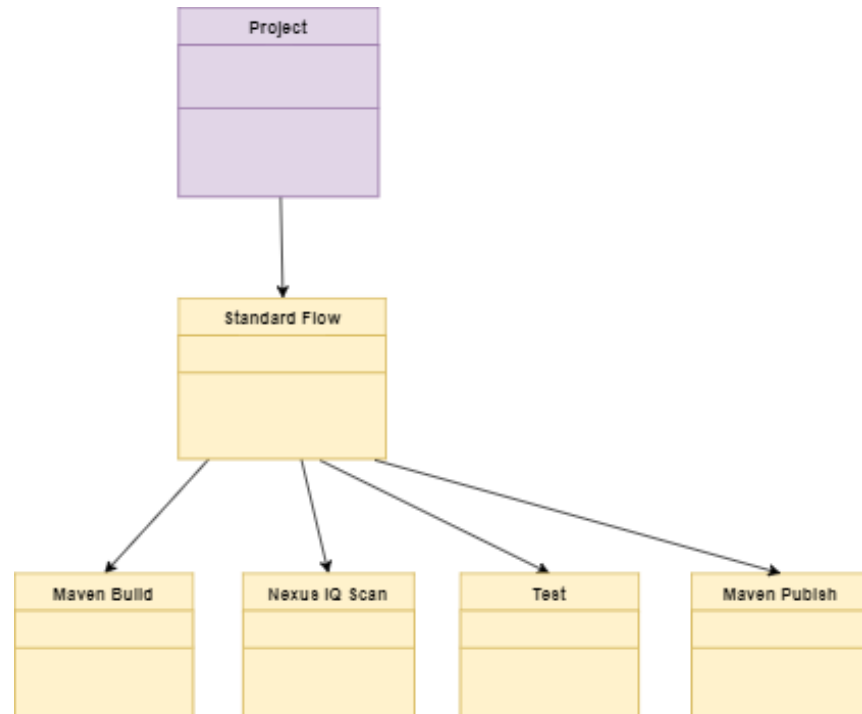
## A Standard Pipeline for Most of the languages used in AAB



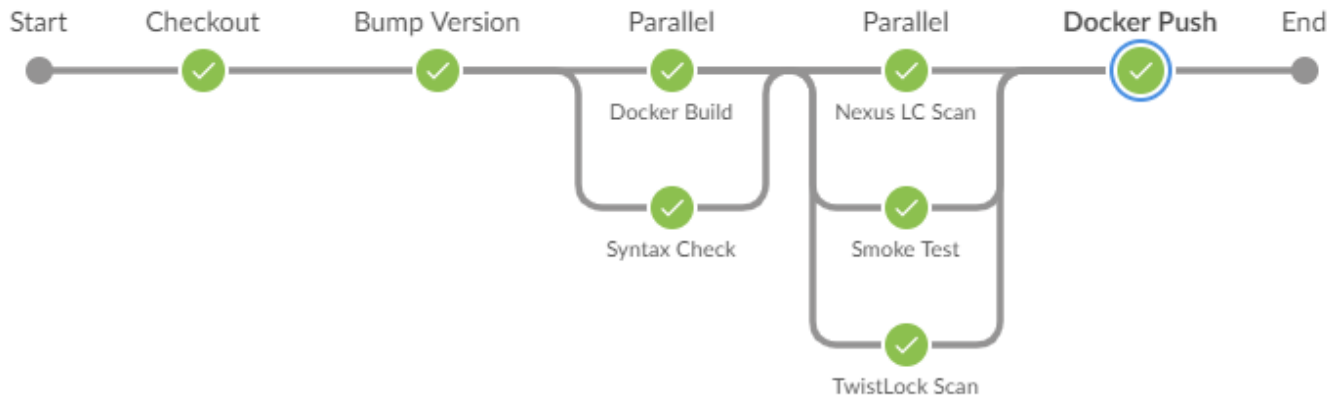
# Standard pipelines at AAB



# Standard Flows



# Docker Image Pipeline

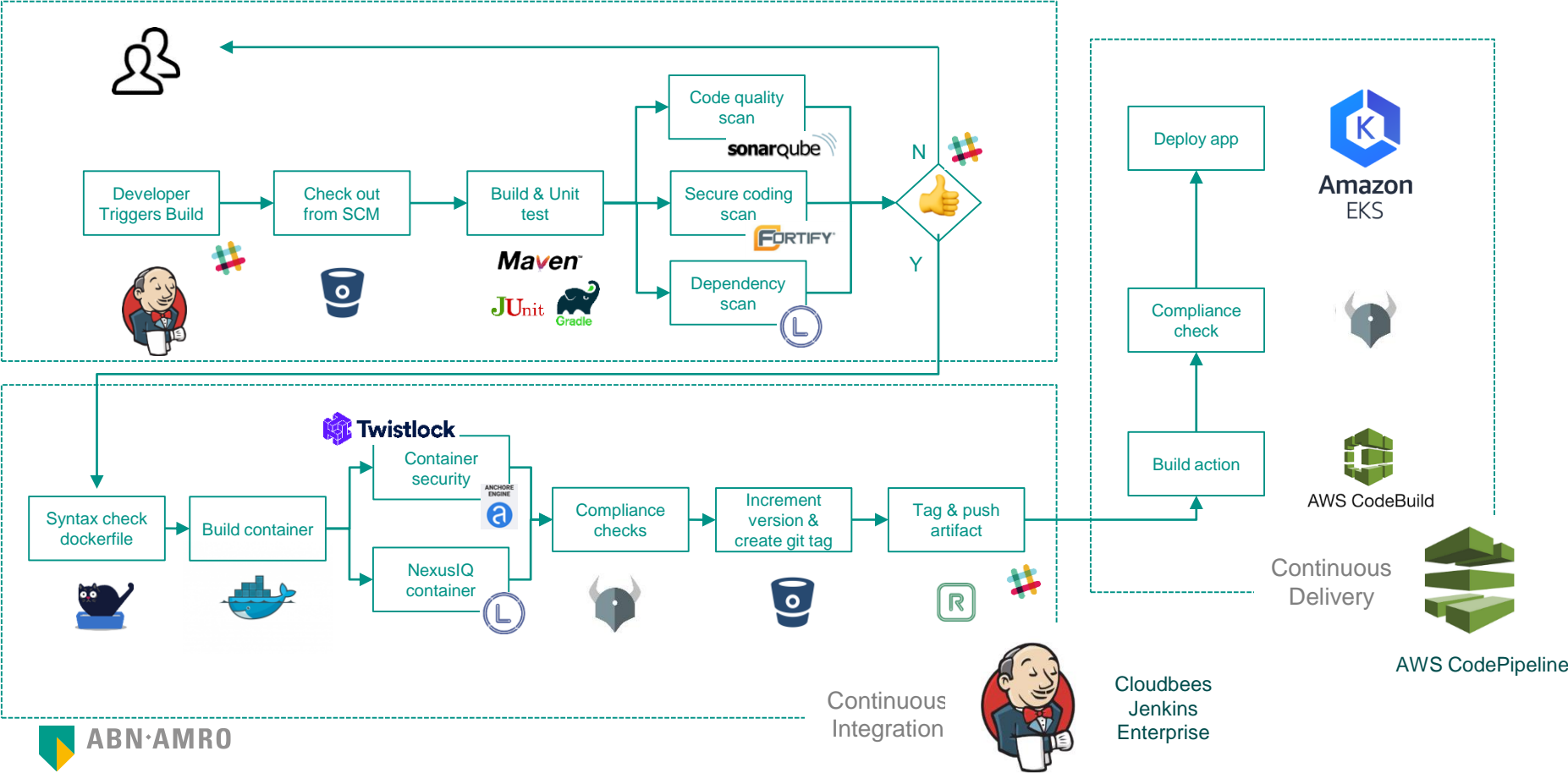


```
@Library(['stpl-docker-image', 'stpl-buildingblocks']) _

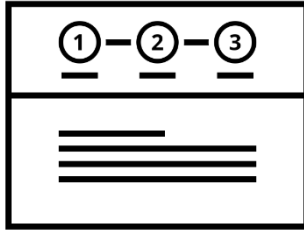
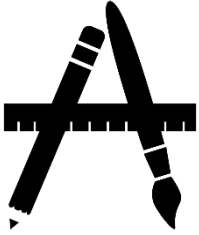
def projectConfig = [dockerImageName           : 'aab-build-maven',
                     dockerImageTags          : '3.6.0-jdk-8, 3.6-jdk-8, 3-jdk-8',
                     dockerSmokeTestCommandGiven : 'mvn -version',
                     dockerSmokeTestCommandOutputExpected: 'Apache Maven 3.6.0',
 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

dockerImageSTPL(projectConfig)
```

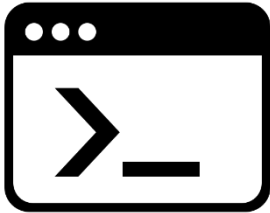
# Standard Pipeline Dockerized



# Our Plan – In Action



Application Onboarding Process



Inhouse Jenkins CLI

Standard Pipelines

splunk<sup>®</sup>>

**splunk enterprise** App: CICD ▾

Selvan, Allan Tony ▾ Messages ▾ Settings ▾ Activity ▾ Help ▾ Find

STPL ▾ Tools ▾ Jira Dashboards Search Documentation ▾

**STPL Jenkins Job Overview** Export ▾ ...

Time Range: Last 7 days ▾ STPL Name: ALL ▾ Host: ALL X ▾ Job Status: ALL ▾ [Hide Filters](#)

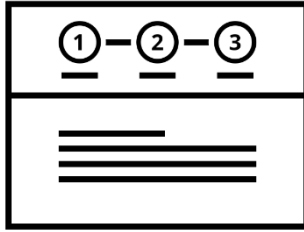
#Unique Jobs	#Executions
<b>492unique jobs</b>	<b>4,524executions</b>

Job status

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_BCDCommons_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/BundelUpdate	349	88.646	SUCCESS	NA	NA
p-jenkins-m08.development.nl.eu.abnamro.com	MOBI/Healthcheck/HB-ET4-Services	1333	63.542	FAILURE	RUN TRIDITION 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	SAMD/SAMD/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_fiscalsavingsproductsigneditenservice/master	13	247.596	SUCCESS	NA	NA
p-jenkins-m01.development.nl.eu.abnamro.com	TRD/TestSTPL-TRDGH-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



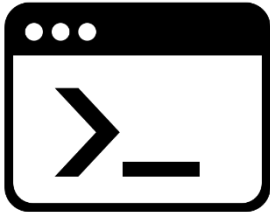
# Our Plan – In Action



Application Onboarding Process

APPDYNAMICS

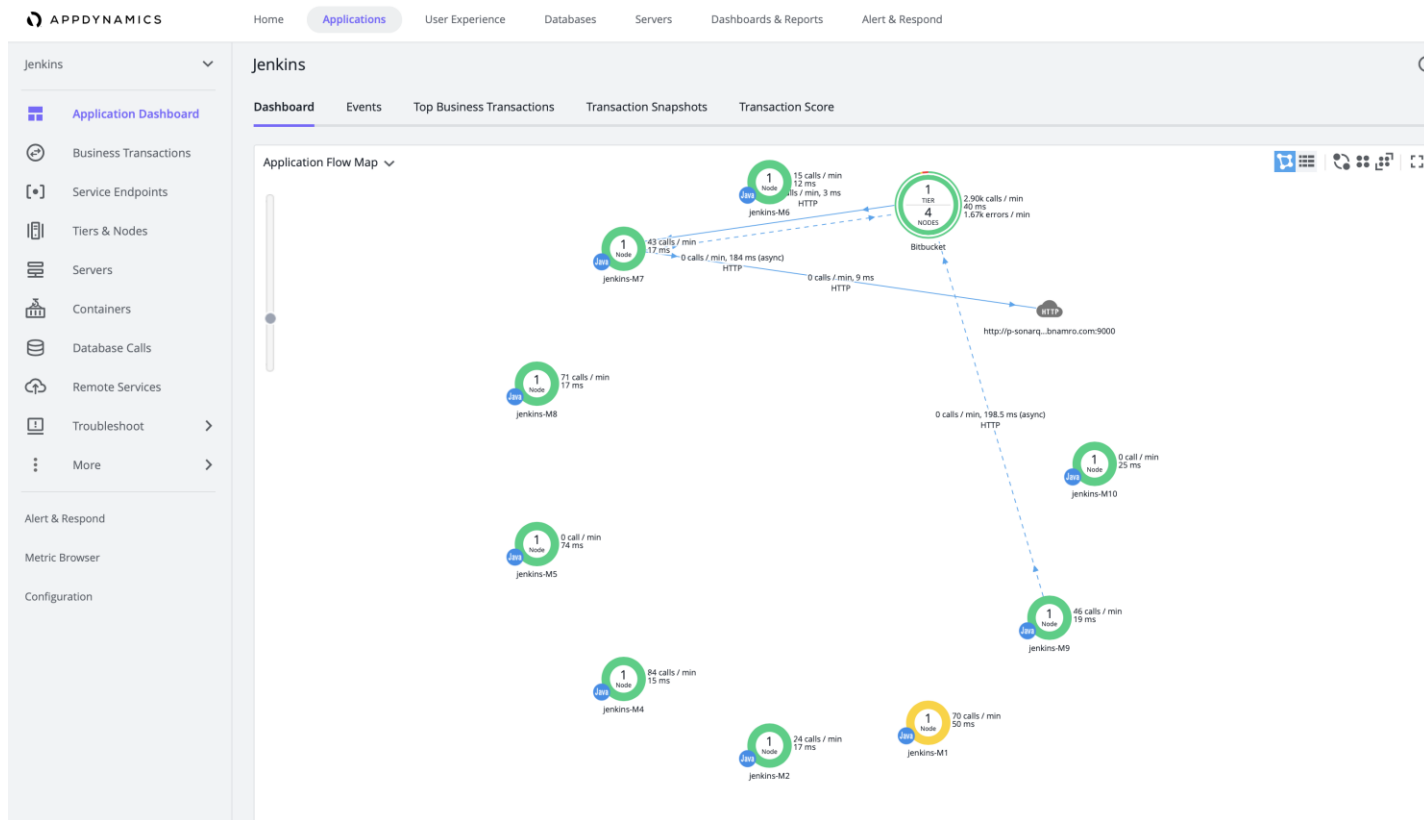
splunk<sup>®</sup>>



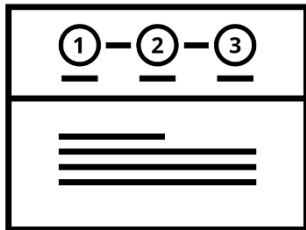
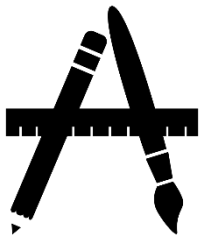
Inhouse Jenkins CLI

Standard Pipelines

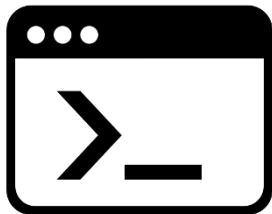
# Appdynamics for Monitoring Jenkins



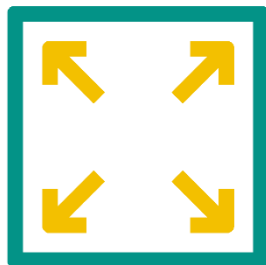
# Our Plan – In Action



Application Onboarding Process



Inhouse Jenkins CLI



10 Masters  
x2 Build Capacity

Standard Pipelines

APPDYNAMICS

1000+ Applications

splunk®

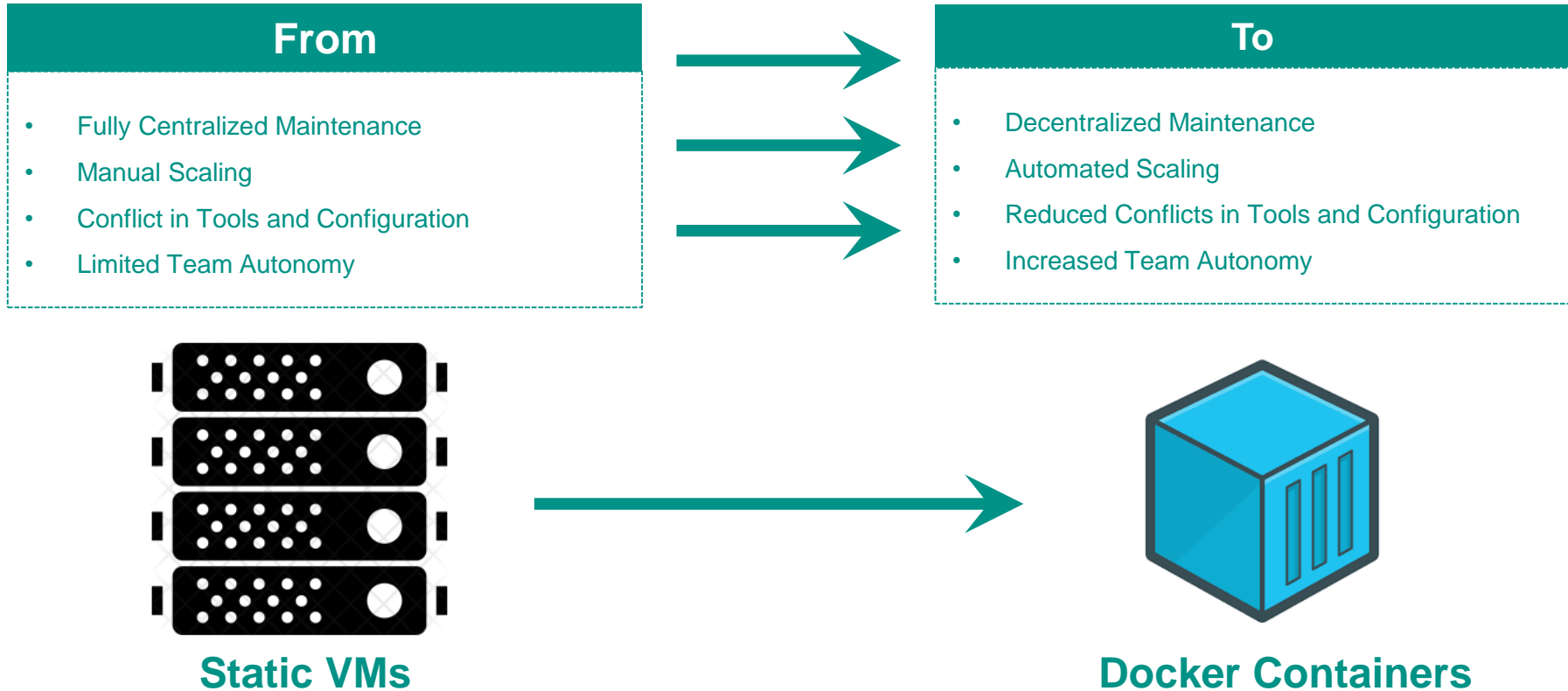


ANSIBLE

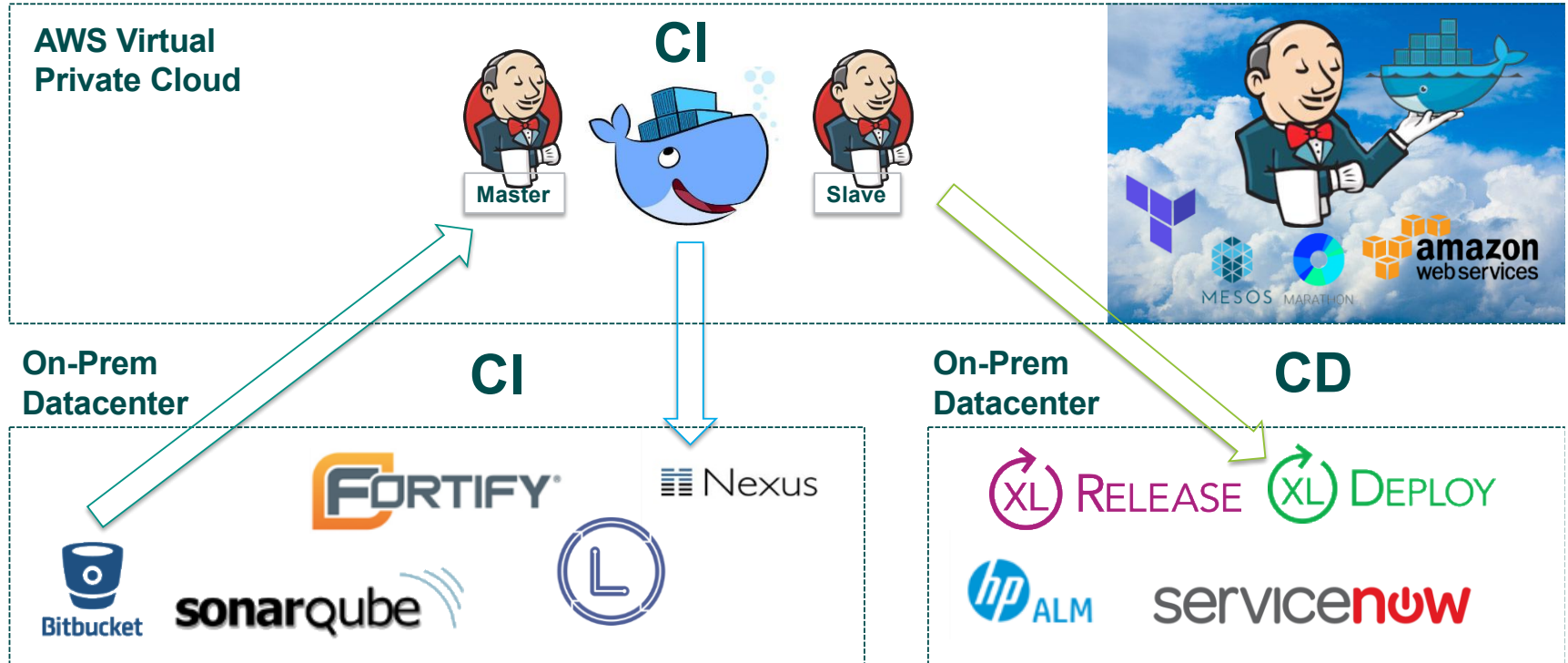
# Our Journey with Jenkins – Continues



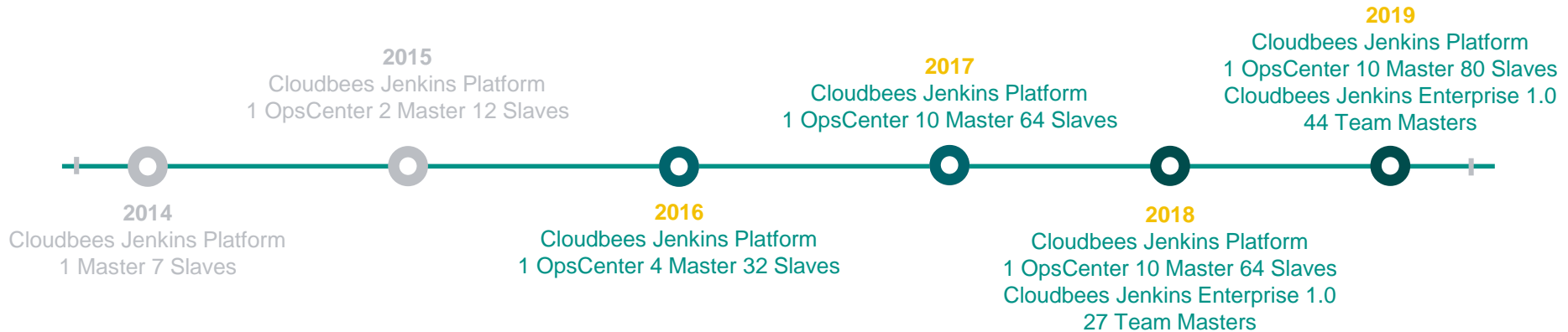
# Required Change to scale further



# 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



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**Thank you!**



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.

LET'S  
HAVE  
A  
<BR />

THANK YOU

GRACIAS ARIGATO SHUKURIA

DANKSCHEEN

BİYAN SHUKRIA

TASHAKKUR ATU

SUKSAMA

GRATIE

MEHRBANI

BOLZİN

MERCI

Other words visible: YAQHANYELAY, SUKSES, EKHMET, TINGKI, BİYAN, SHUKRIA, GRACIAS, ARIGATO, SHUKURIA, DANKSCHEEN, TASHAKKUR ATU, SUKSES, EKHMET, GRATIE, MEHRBANI, BOLZİN, MERCI, KONAPSUMNIDA, MAAKE, LAH, MERASTAHNY, GAEJTINO, TAVTAPUCH, MEDAKHGE, BARA, JUSPAXAR, SPASSIBO, SNACHALHYA, WURUN, CHALTU, YAHYABAD, NADIKUR, MATTEKA, HUK, YUSFAGARATAM, HUK, UNELCHEEN, SPASIBO, DEKRAU-JA, NEMCHALHYA, HATIR, GUR, EKAD, SIKOMO, MARTIN, MINBAOWCHAE.



Free  
Drinks