



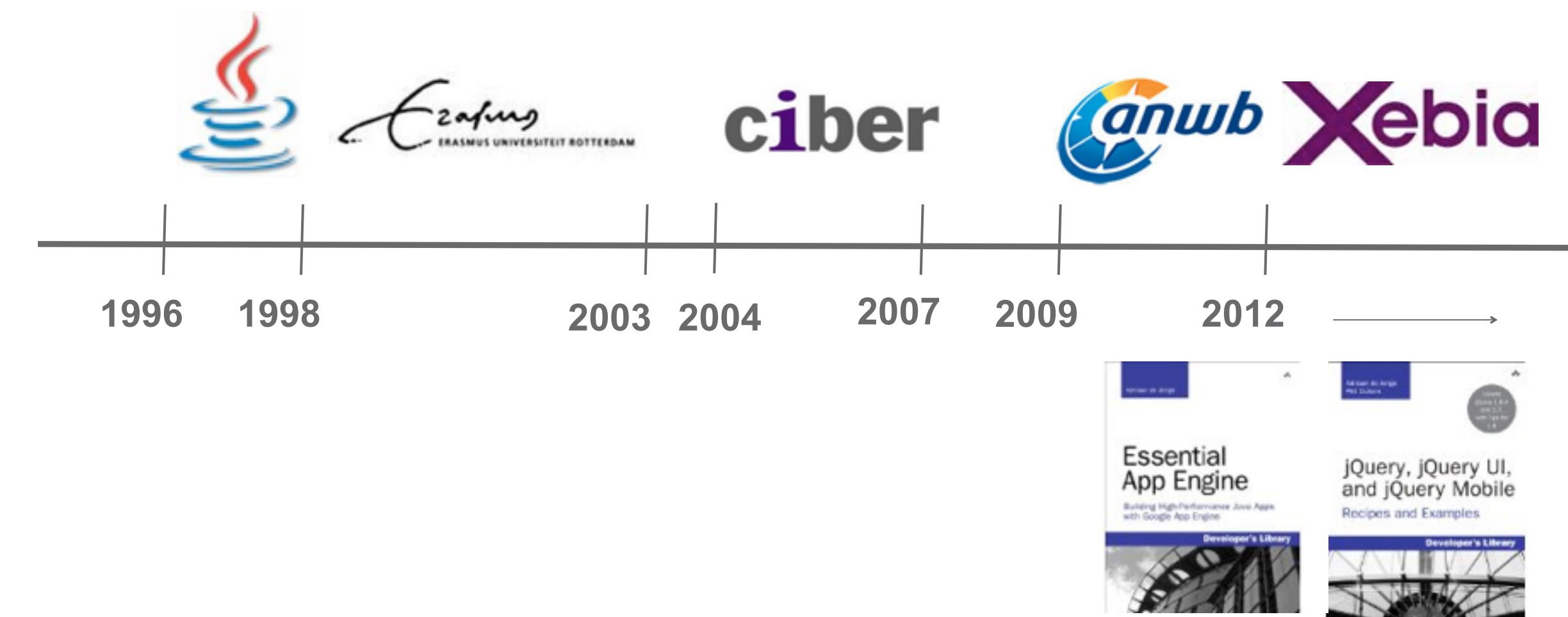
# SCHRAP DE OTAP!

Adriaan de Jonge

– 4 juni 2013

## ADRIAAN DE JONGE

- › Principal Consultant
  - DevOps
  - Continuous Delivery
  - Agile Architecture
- › Auteur
  - Internet Technologies



## EVALUATIE



**[HTTP://BIT.LY/XC\\_SCHRAP](http://bit.ly/xc_schrap)**

“ Na ontwikkeling kost het mij minimaal twee weken om software in productie te krijgen. De gemiddelde doorlooptijd van een wijziging is meer dan vier weken.

## OTAP

- › Ontwikkeling
- › Test
- › Acceptatie
- › Productie



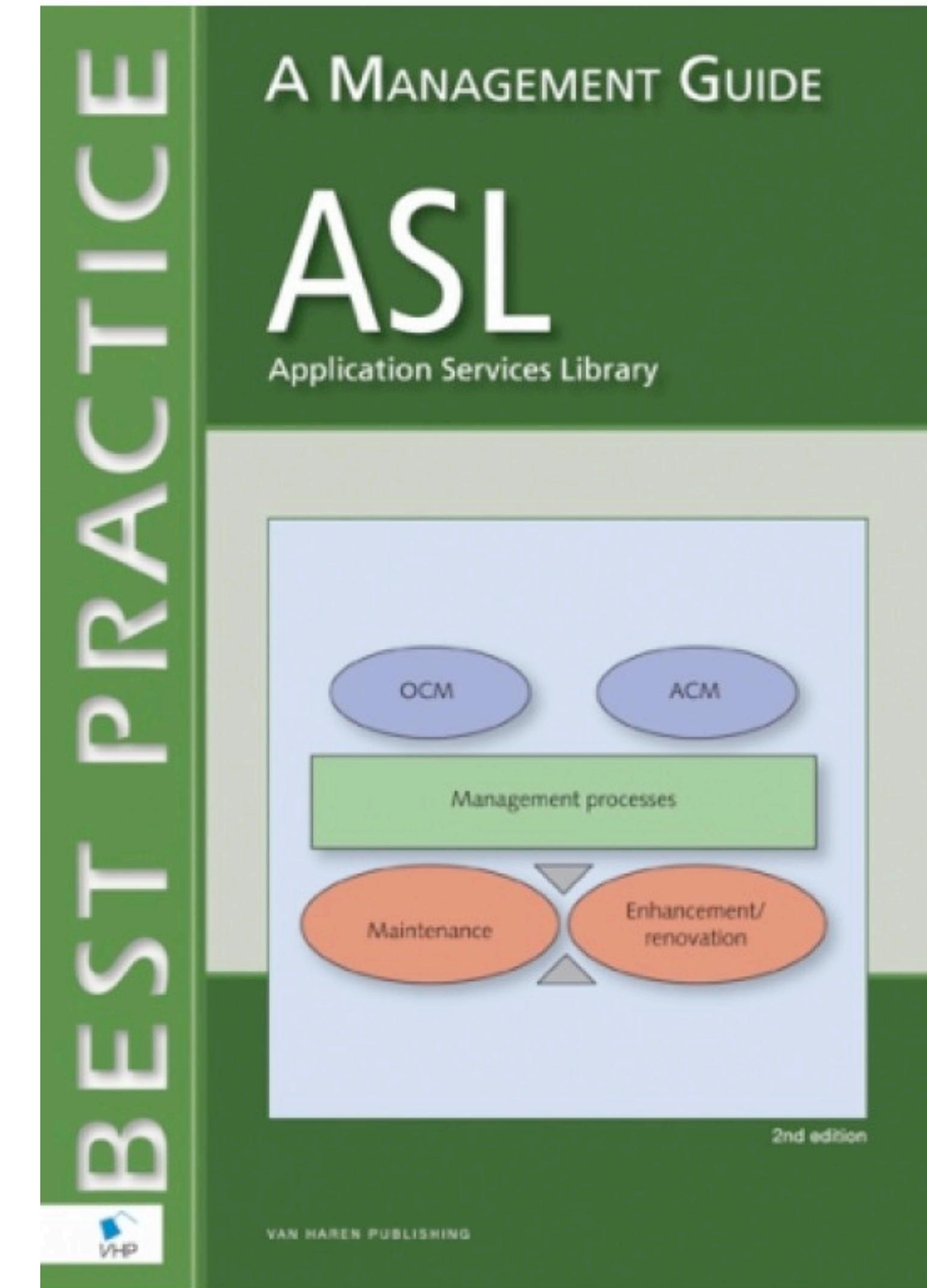
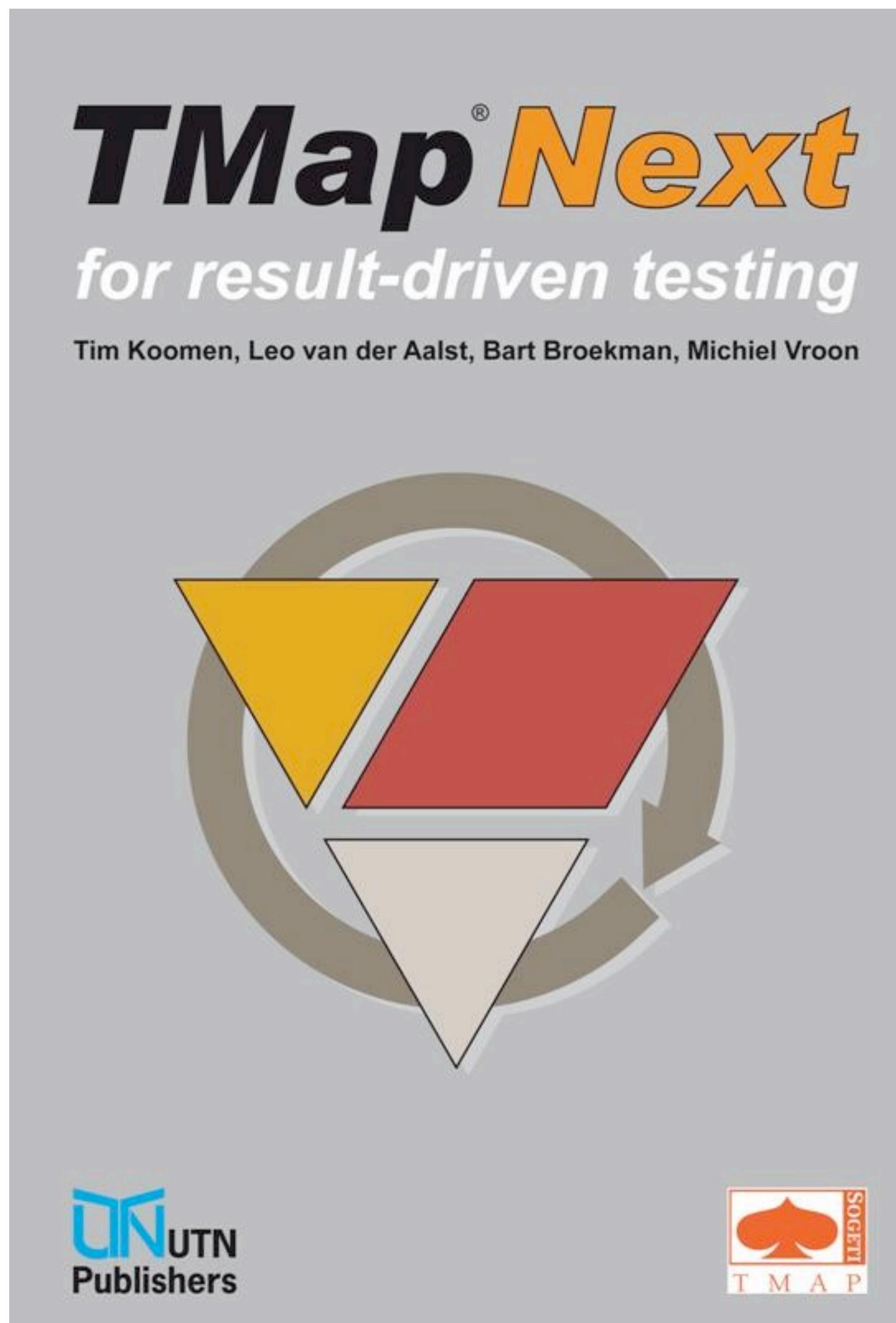
## OTAP

## DTAP

- › Development
- › Test
- › Acceptance
- › Production



## DTAP



“ OTAP heeft de neiging zich uit te breiden

## LOTAP

- › Lokaal
- › Ontwikkeling
- › Test
- › Acceptatie
- › Productie

## LOTAPQ

- › Lokaal
- › Ontwikkeling
- › Test
- › Acceptatie
- › Productie
- › Quick fix

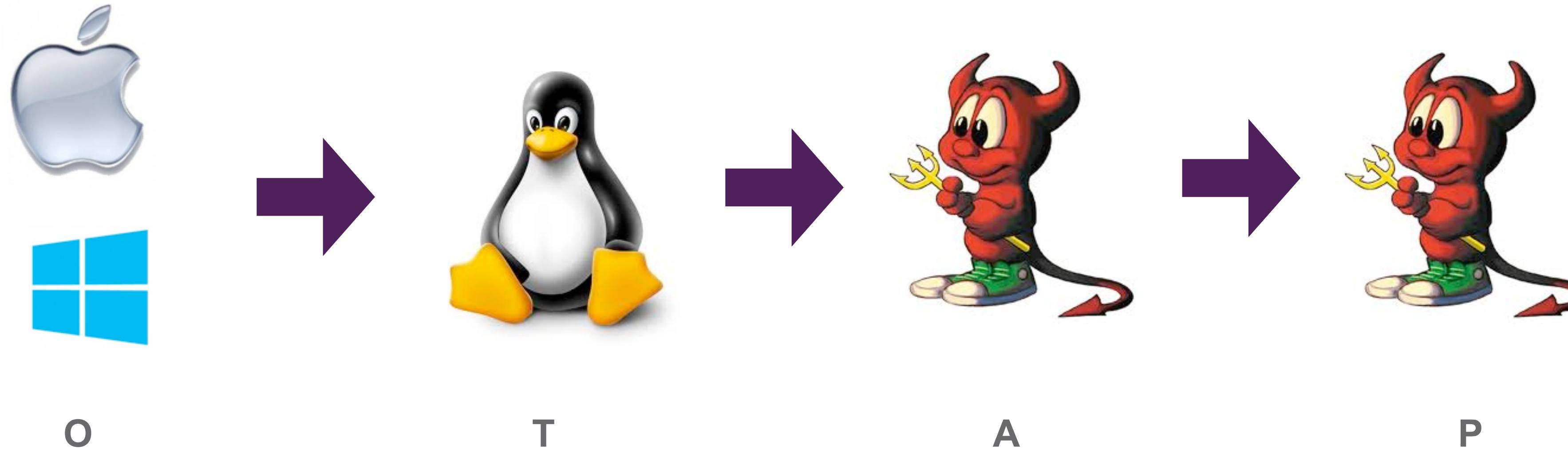
## LOITAPQ

- › Lokaal
- › Ontwikkeling
- › Integratie
- › Test
- › Acceptatie
- › Productie
- › Quick fix

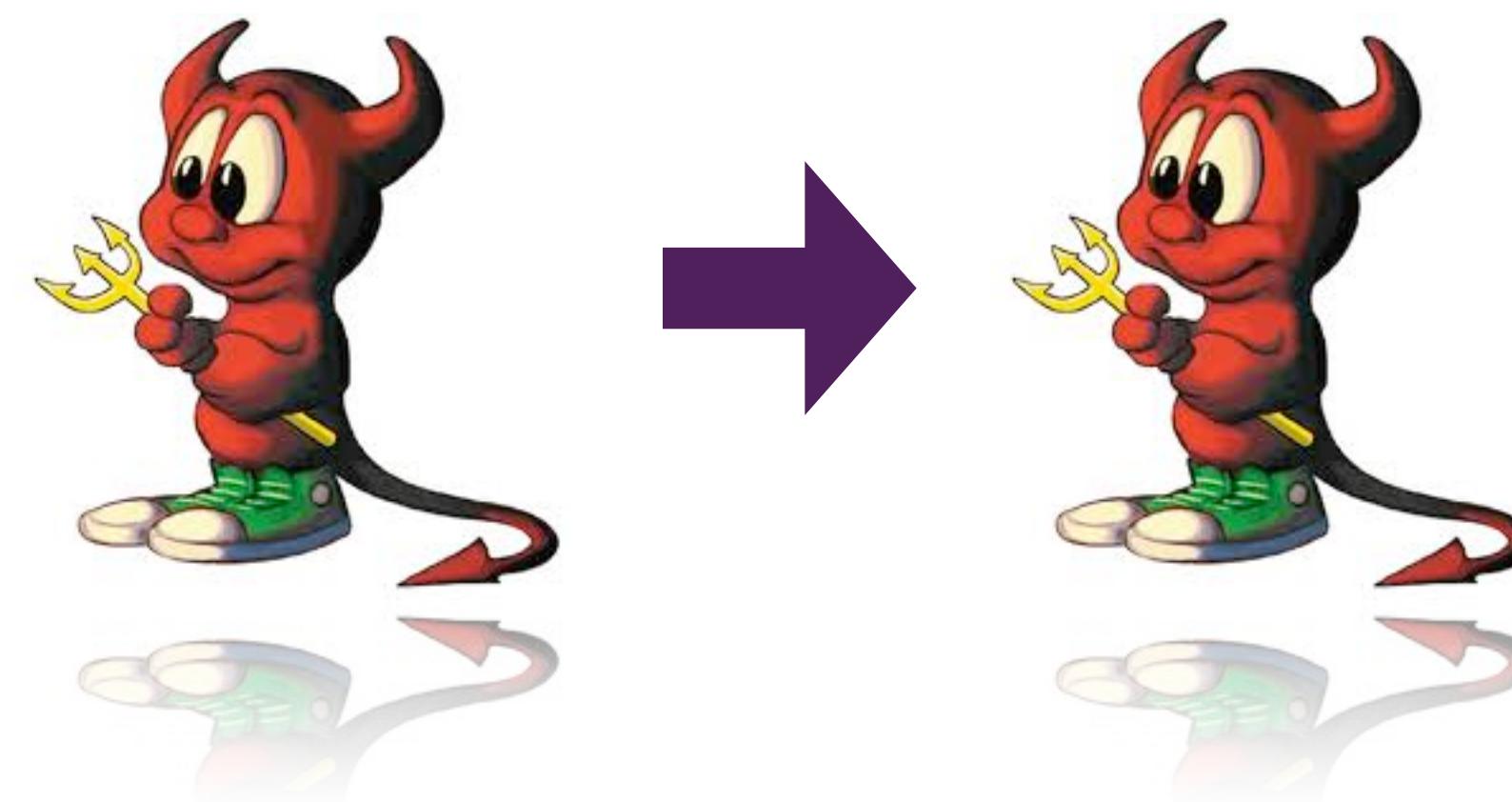
## LOIT'TAASPQ

- › Lokaal
- › Ontwikkeling
- › Integratie
- › T': Test
- › Test
- › “Kleine a”:Acceptatie
- › “Grote A”:Acceptatie
- › Staging / Pre-Productie
- › Productie
- › Quick fix

# WAAROM WAS DE OTAP ER OOK ALWEER?



## UITEENLOPENDE OMGEVINGEN



## PRODUCTION-LIKE ACCEPTATIE



## FORMELE ACCEPTATIE OPRACHTGEVER

# FORMELE ACCEPTATIE





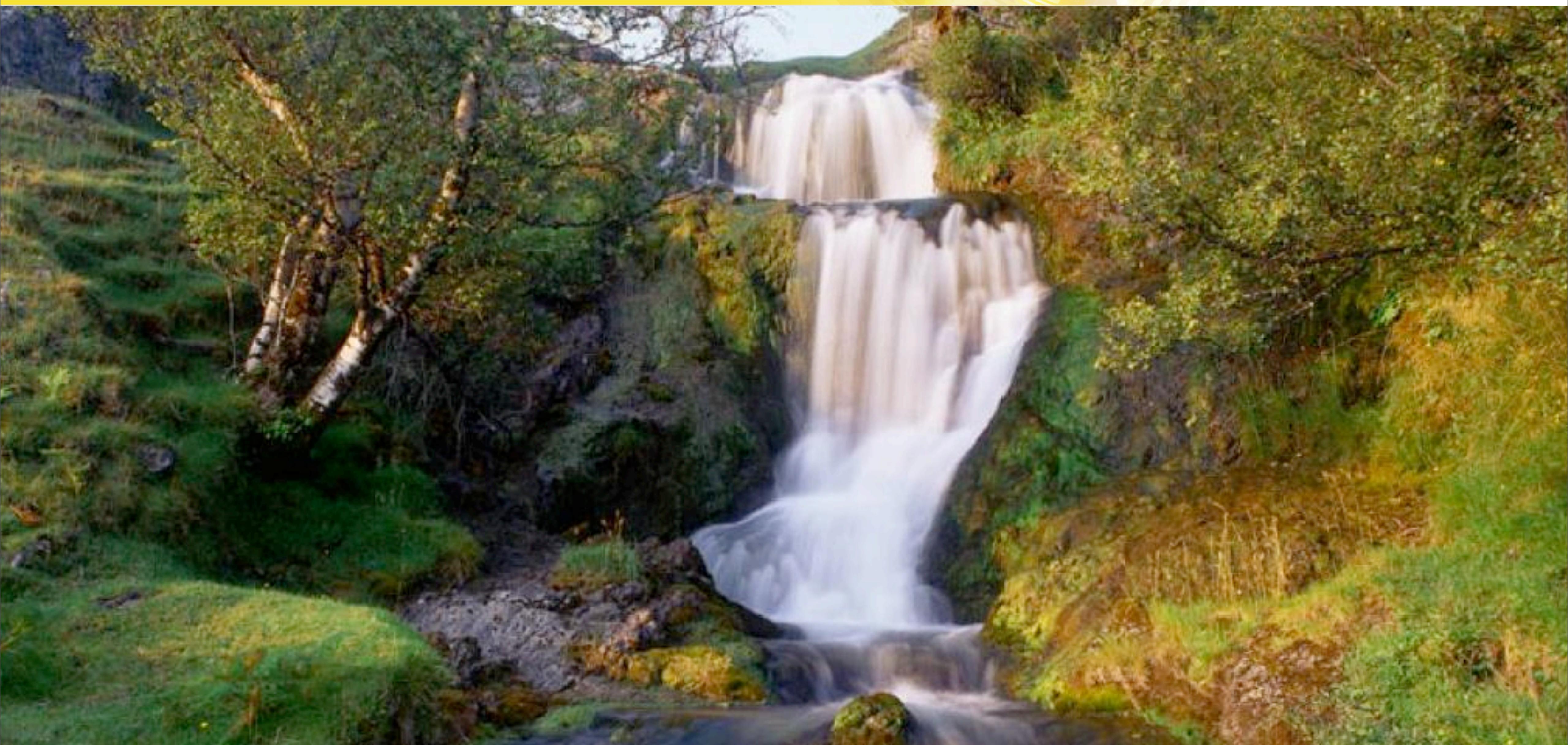
## VELE HANDMATIGE TESTS DOOR VERSCHILLENDEN ACTOREN

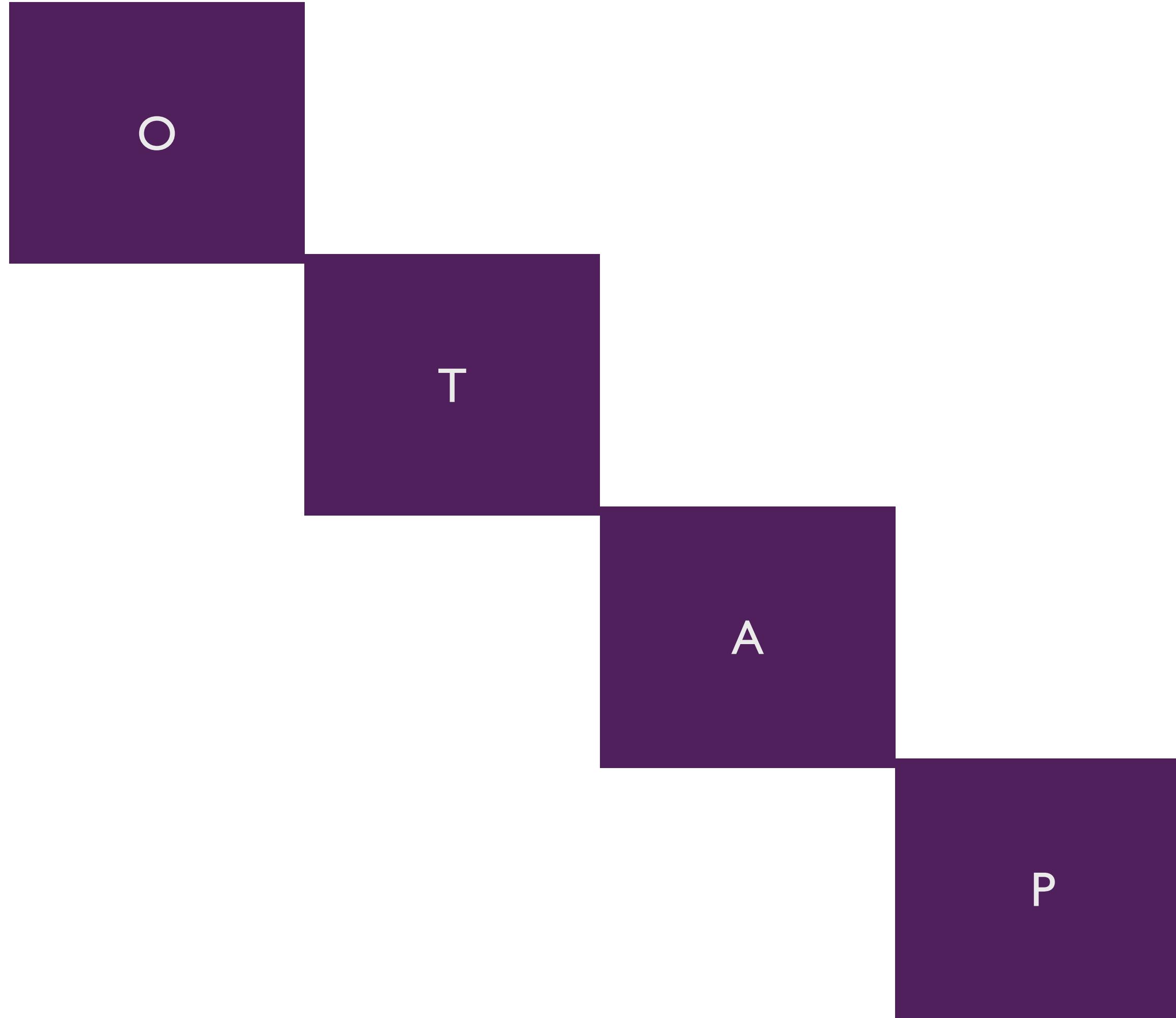


## INSTABIELE PRODUCTIE

# WAT IS HET PROBLEEM MET DE OTAP?







“Acceptatie is bezet

# HANDMATIG TESTEN

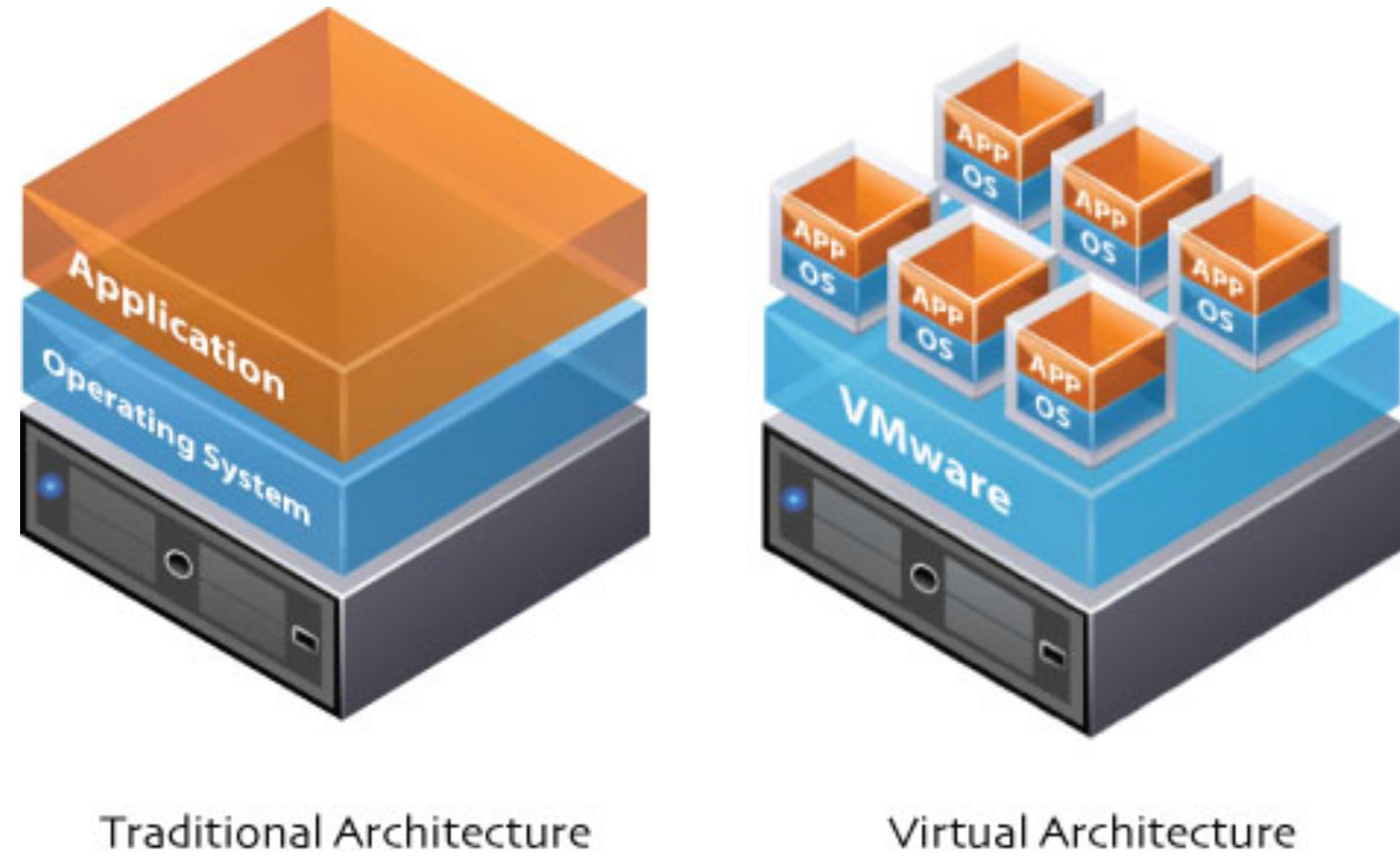
**KORTOM: VEEL TE WINNEN OP GEBIED VAN  
CONTINUOUS DELIVERY**

**“ZONDER OTAP IS ONVERANTWOORD”**

**ZONDER TESTEN IS ONVERANTWOORD!**

# **TESTEN OP EEN OMGEVING DIE AFWIJKT VAN PRODUCTIE IS ONVERANTWOORD**

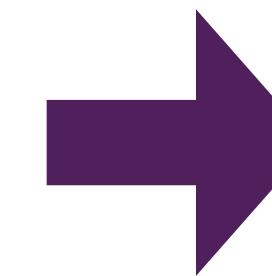
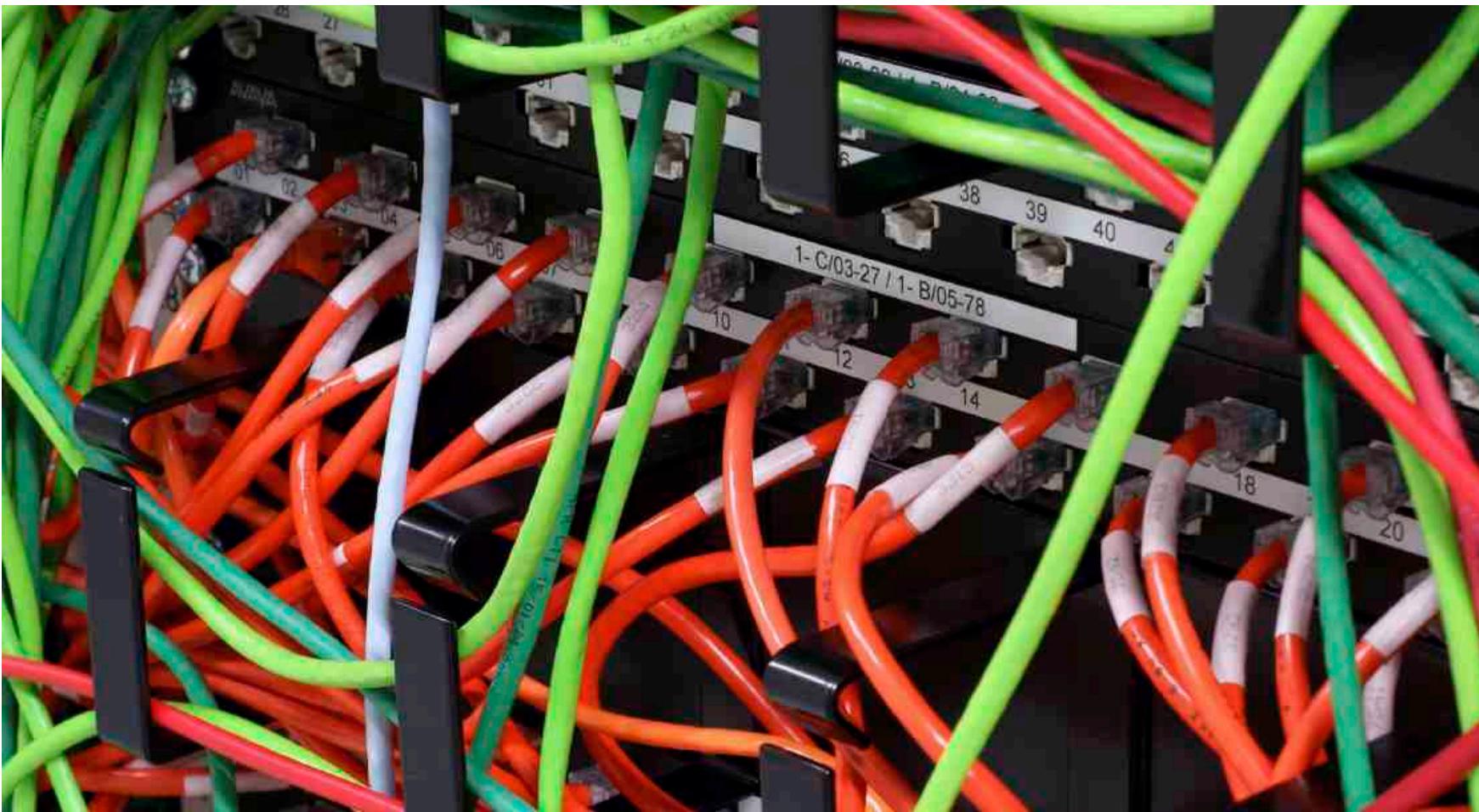
# WAT IS ER VERANDERD?



Traditional Architecture

Virtual Architecture

## VIRTUALISATIE



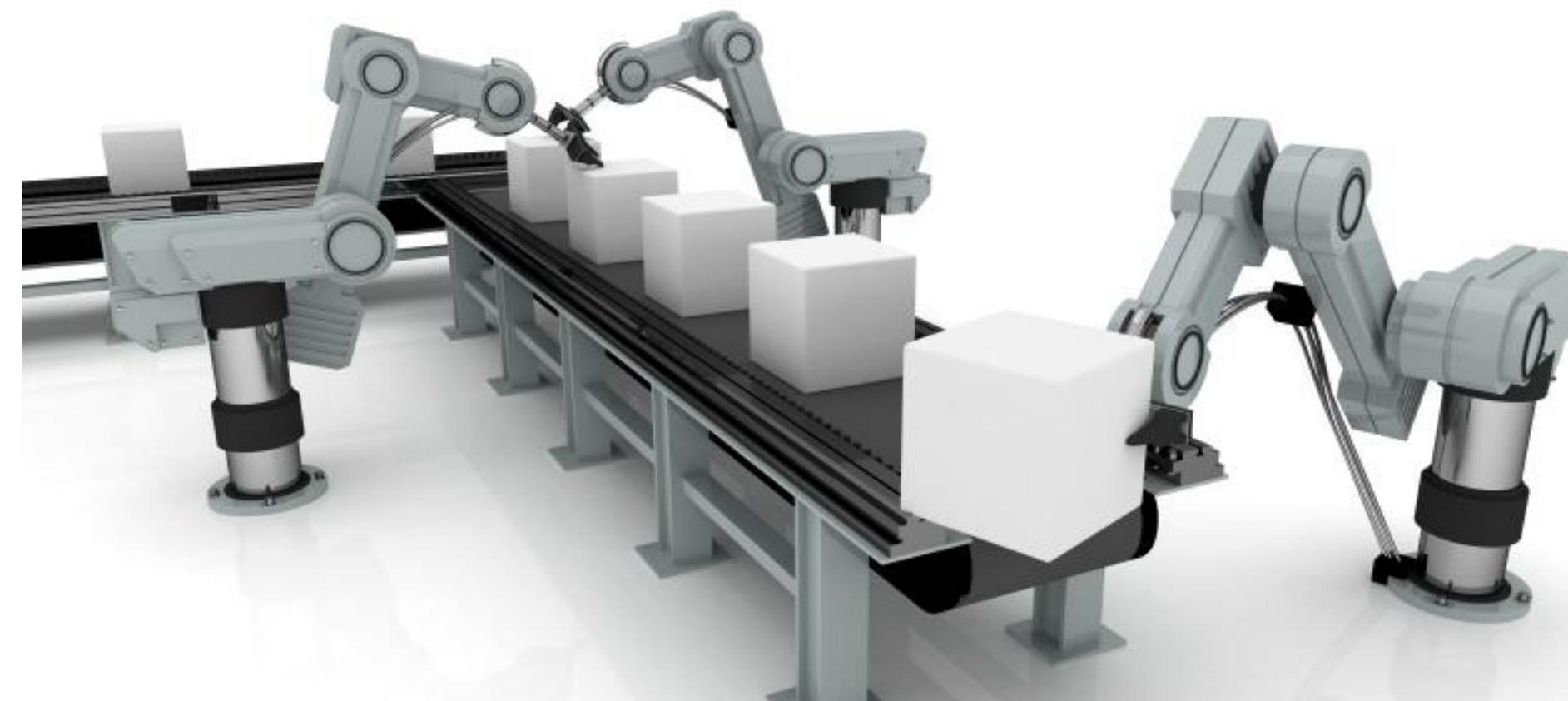
```
node "kermit.example.com" {
  class { "ntp":
    servers  => [ '0.us.pool.ntp.org iburst','1.us.pool.ntp.org iburst','2.us.pool.r
    autoupdate => false,
    restrict => false,
    enable => true,
  }
}

node "grover.example.com" {
  class { "ntp":
    servers  => [ 'kermit.example.com','0.us.pool.ntp.org iburst','1.us.pool.ntp.org
    autoupdate => true,
    restrict => false,
    enable => true,
  }
}

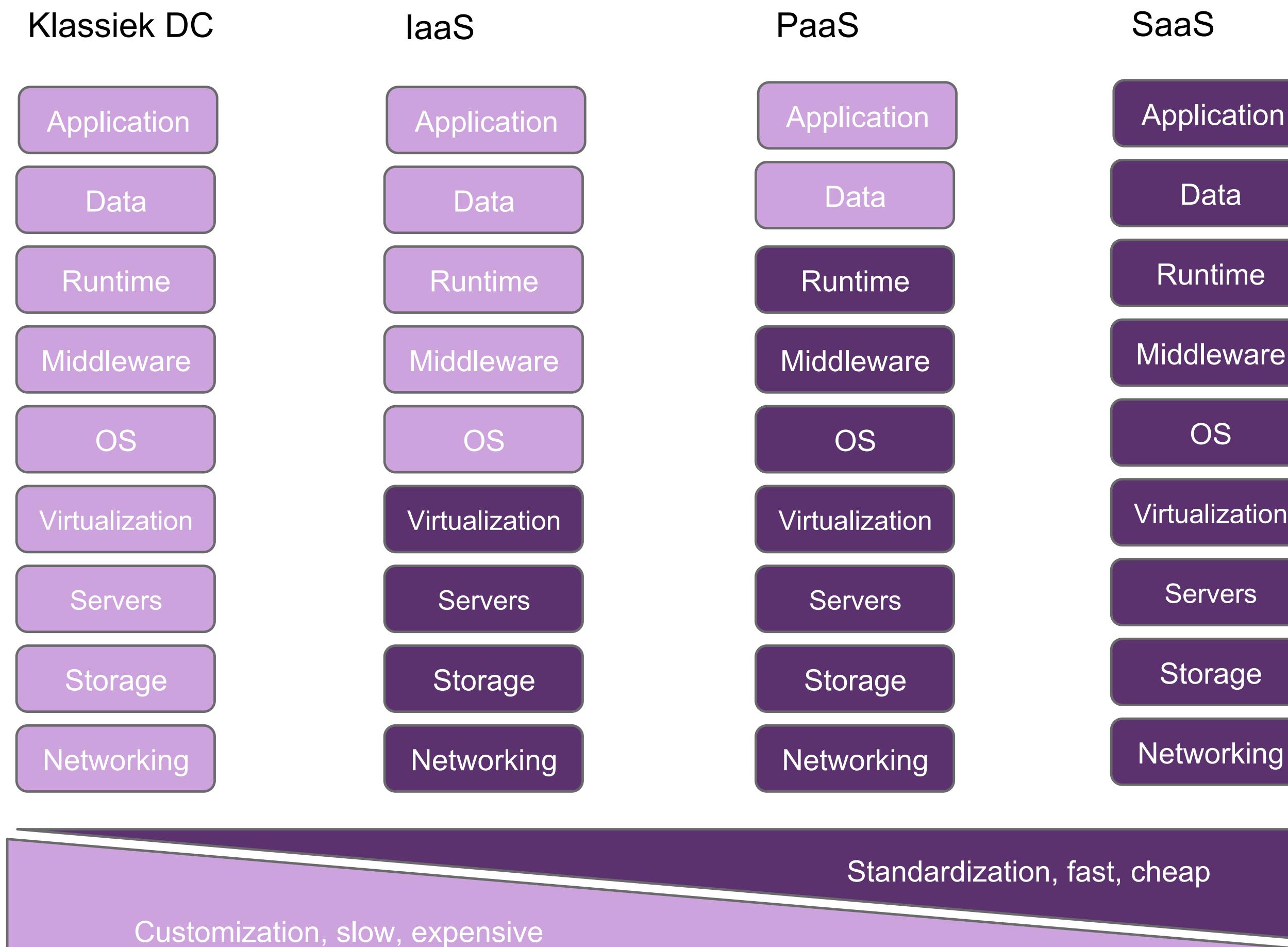
node "snuffle.example.com", "bigbird.example.com", "hooper.example.com" {
  class { "ntp":
    servers  => [ 'grover.example.com', 'kermit.example.com'],
    autoupdate => true,
    restrict => true,
    enable => true,
  }
}
```



## INFRASTRUCTURE AS CODE



# MACHINES AANMAKEN: HERHAALBAAR & BETROUWBAAR



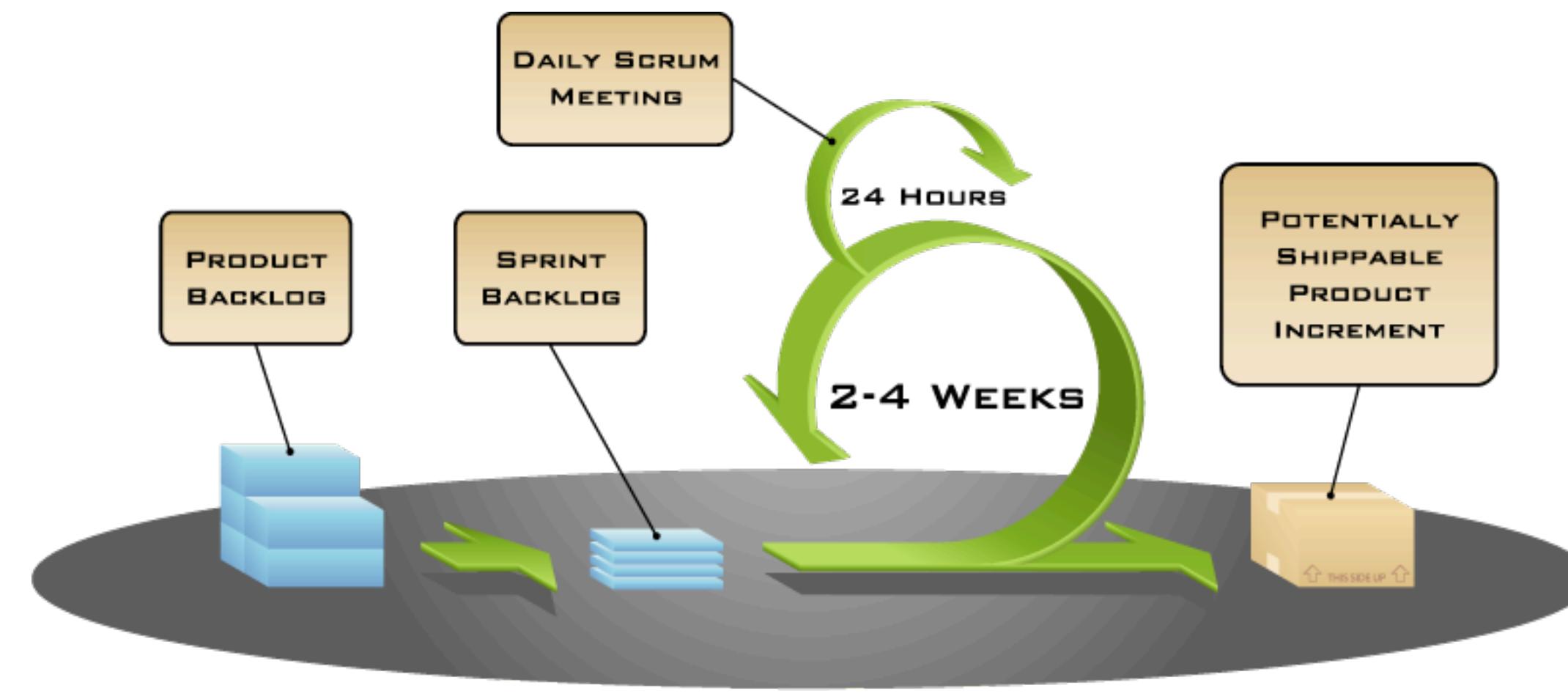
## PLATFORM AS A SERVICE



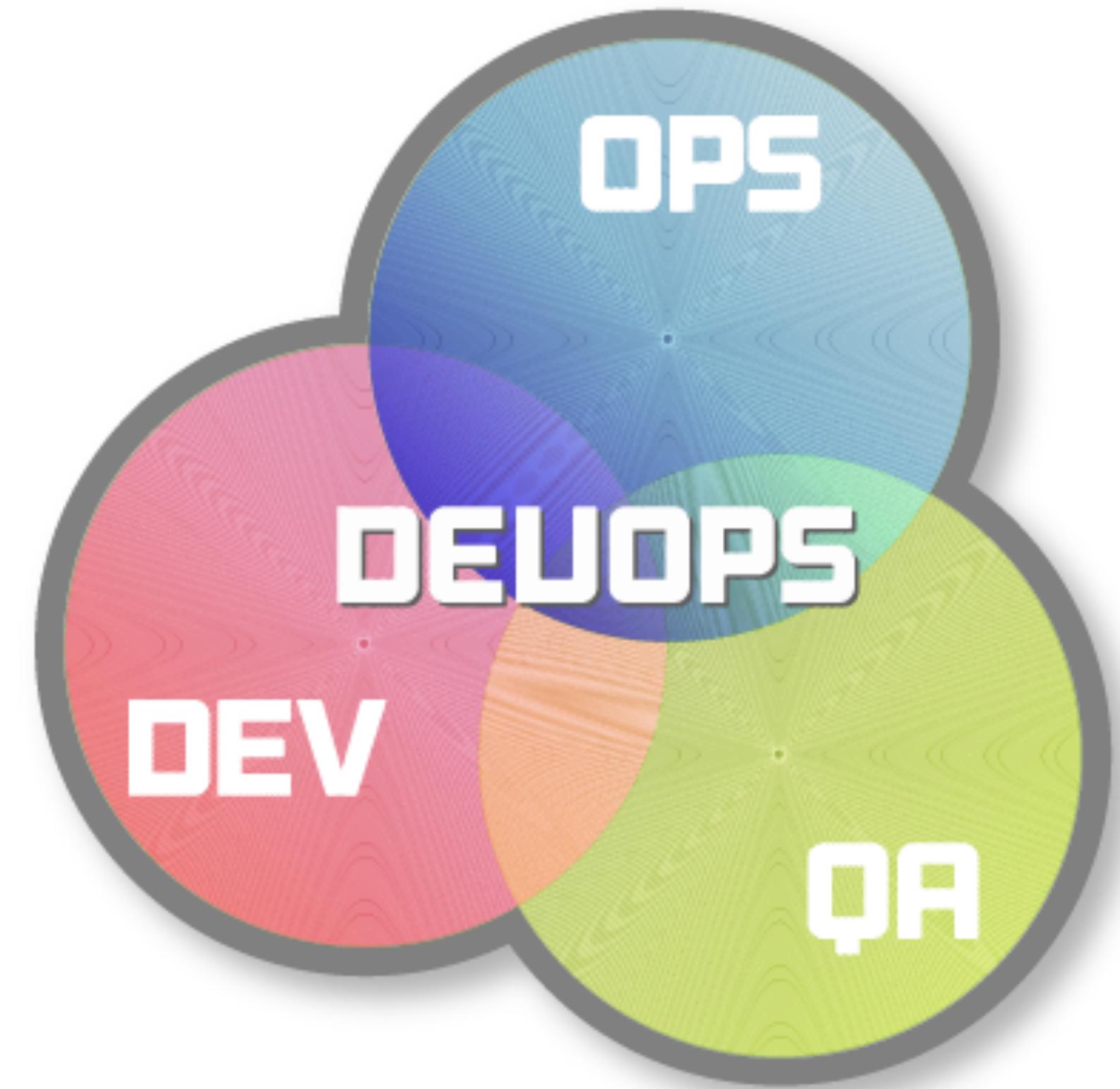
## PRODUCTION-LIKE DEVELOPMENT ENVIRONMENT

“Ja, maar....

# HOE ZIET MIJN ACCEPTATIE ER NU DAN UIT?



# AGILE

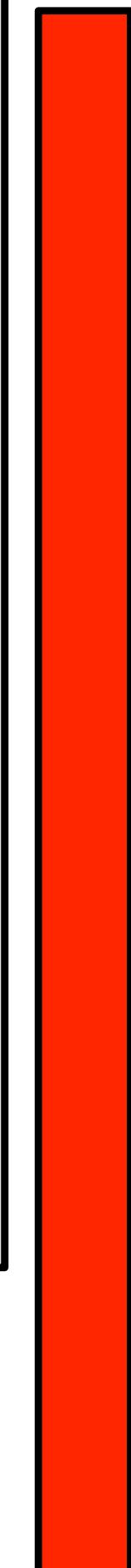
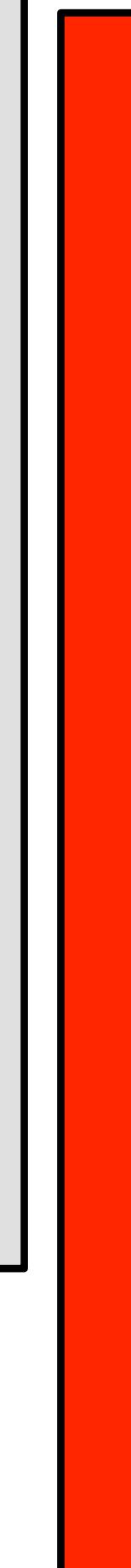


## DEVOPS

Business

Development

Operations



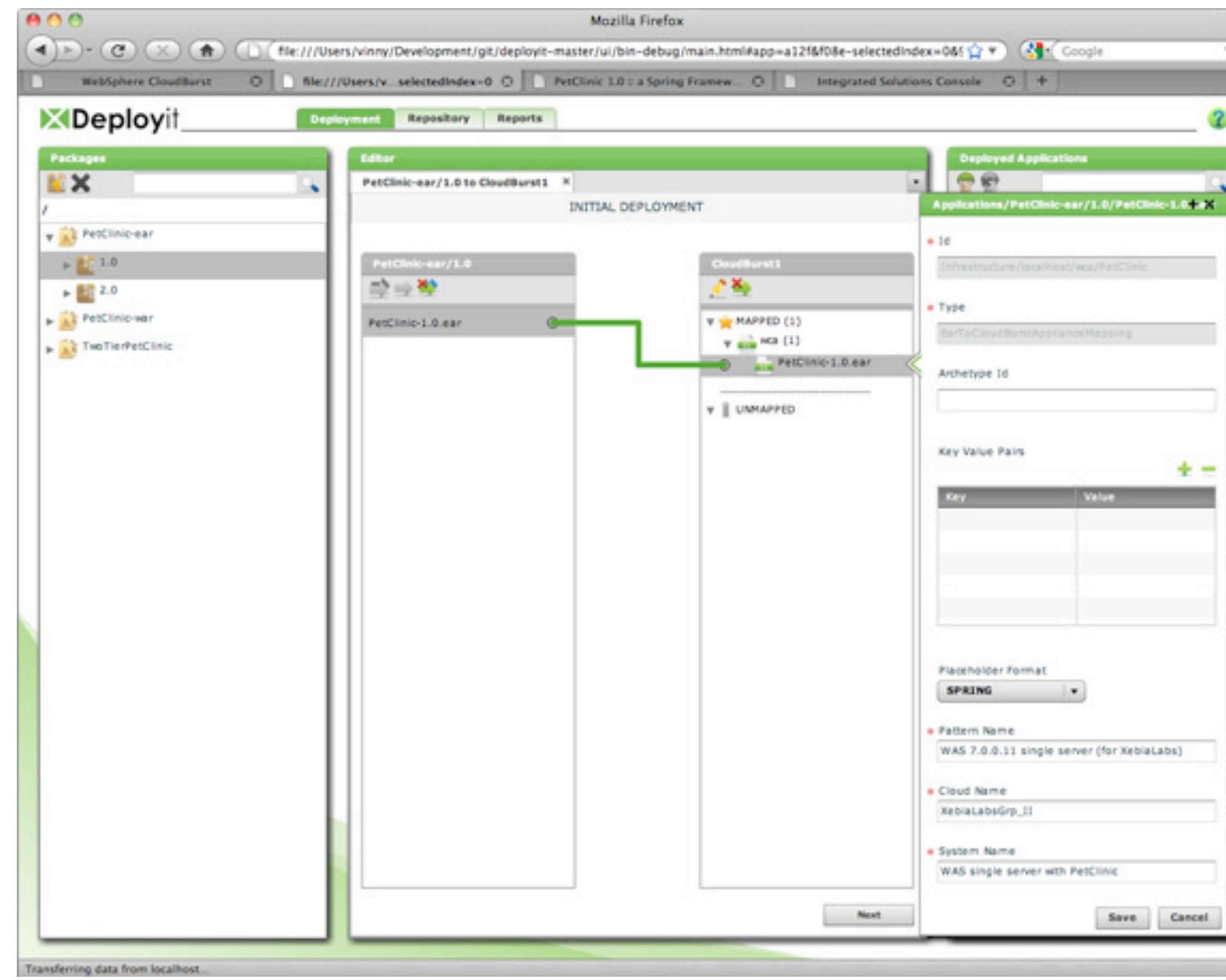
Business

Development

Operations



## AUTOMATED TESTING



## AUTOMATED DEPLOYMENT

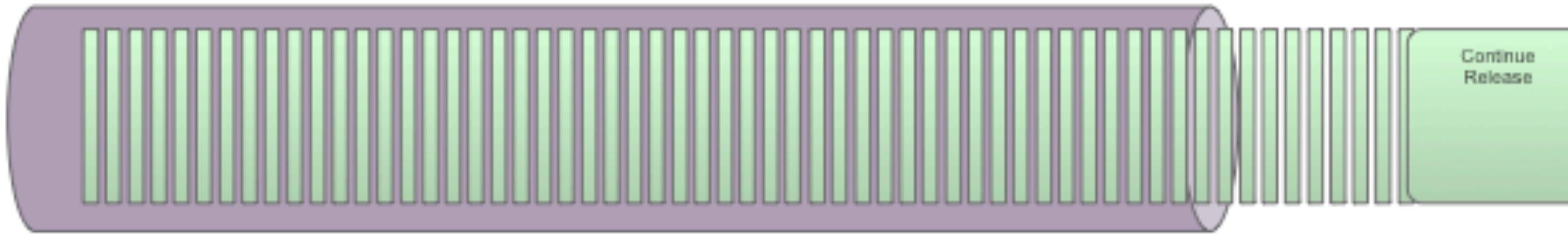


# CONTINUOUS INTEGRATION

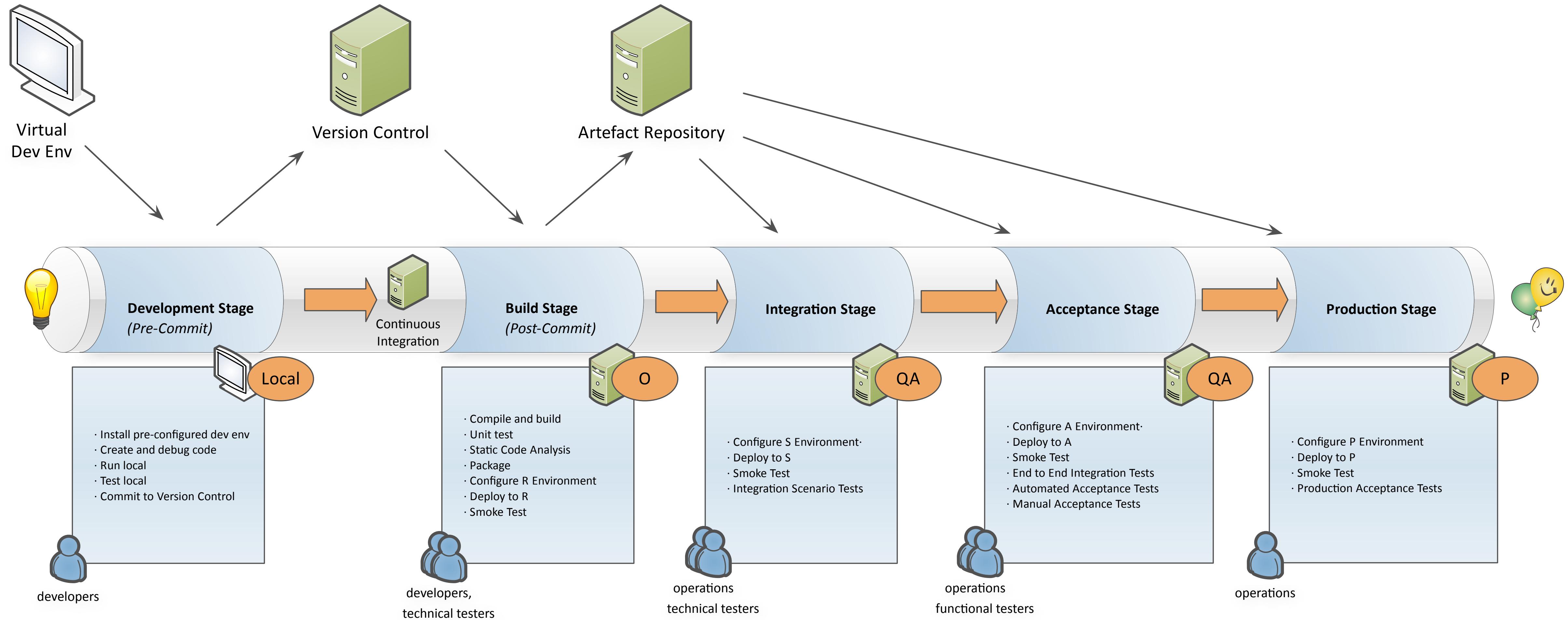
## Traditional



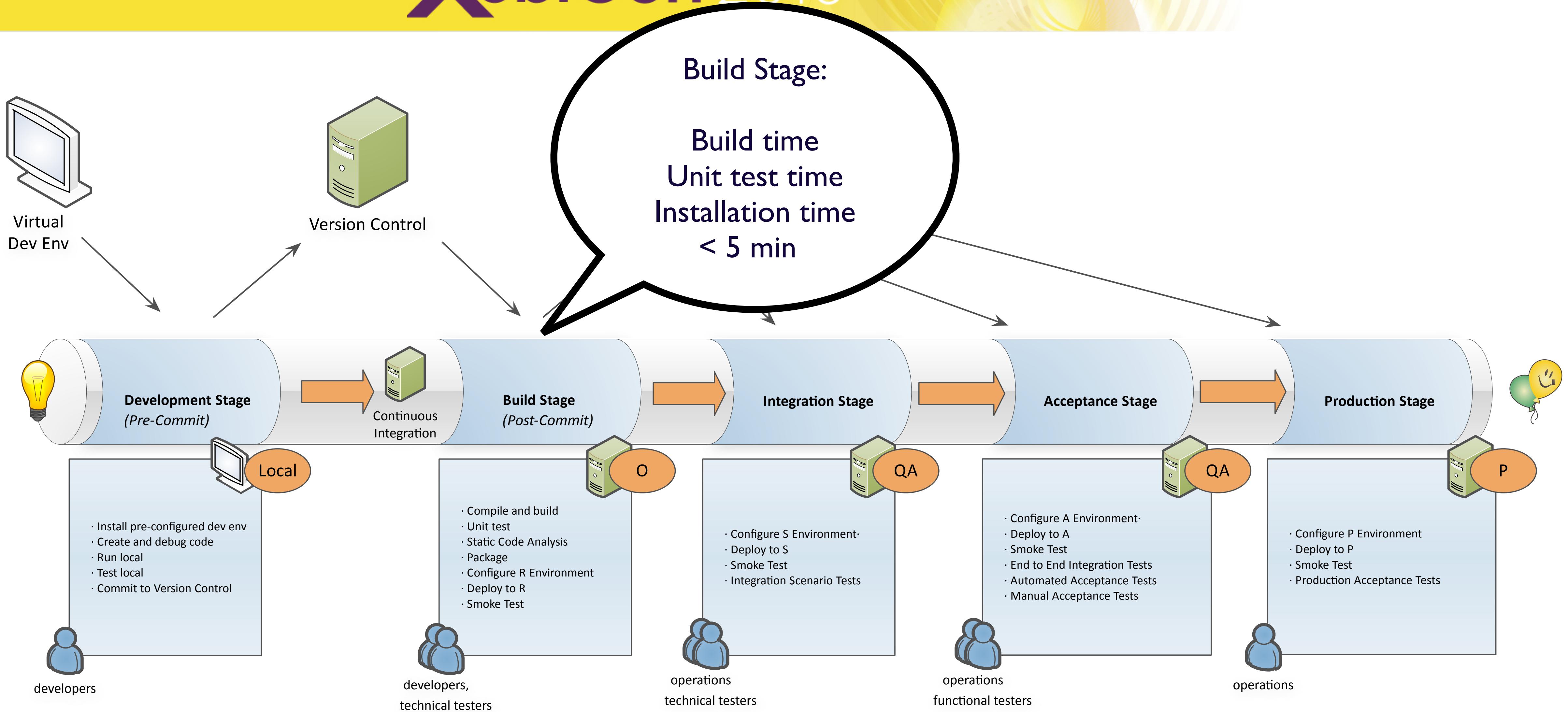
## Continuous Delivery

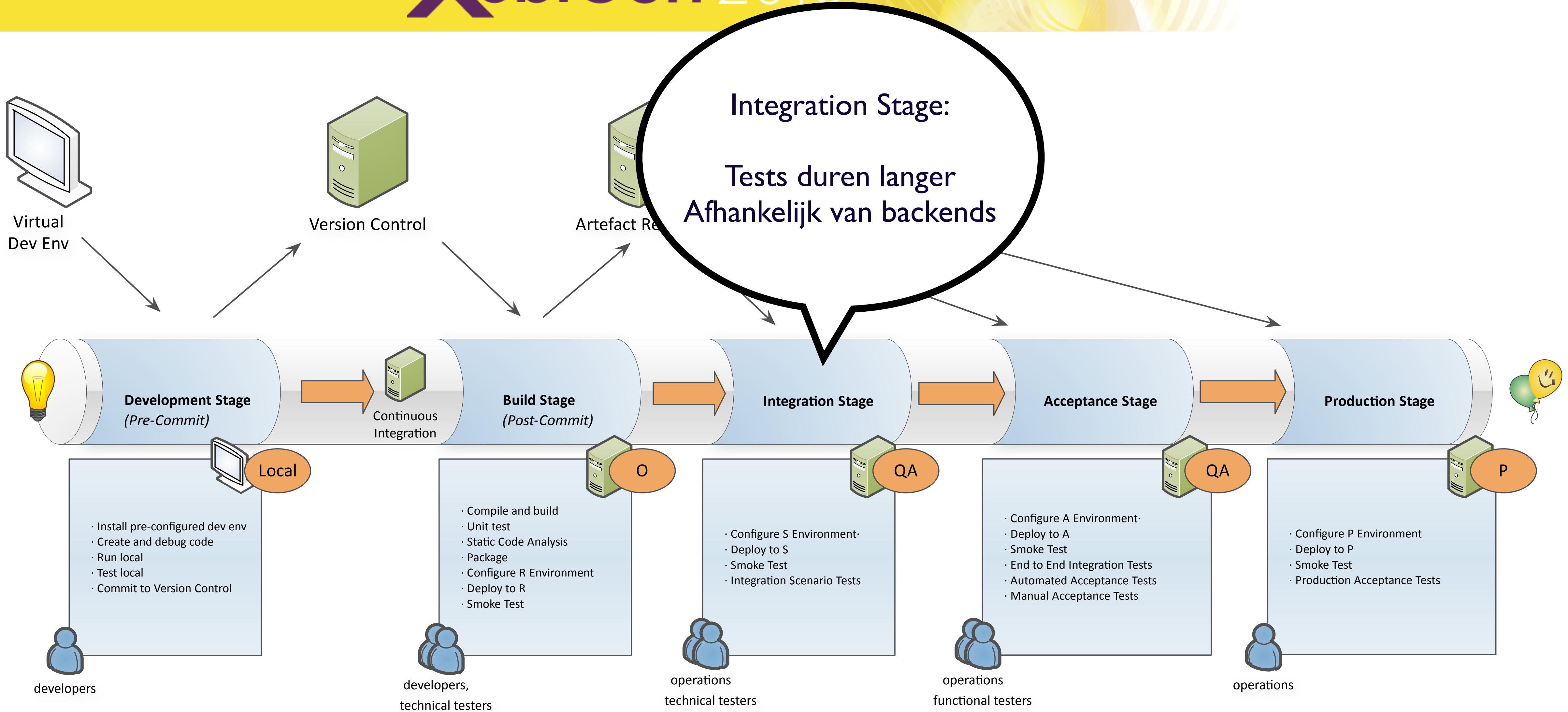


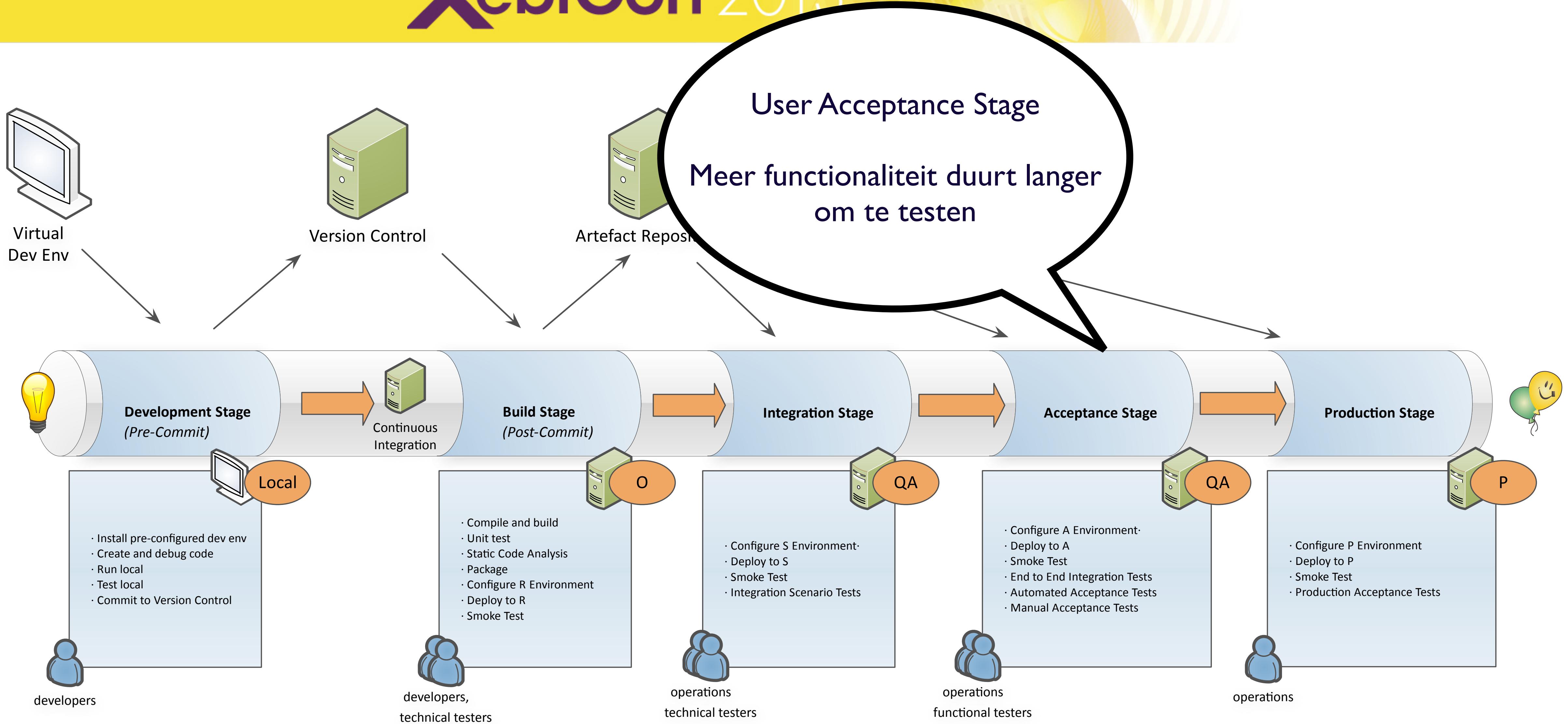
# CONTINUOUS DELIVERY

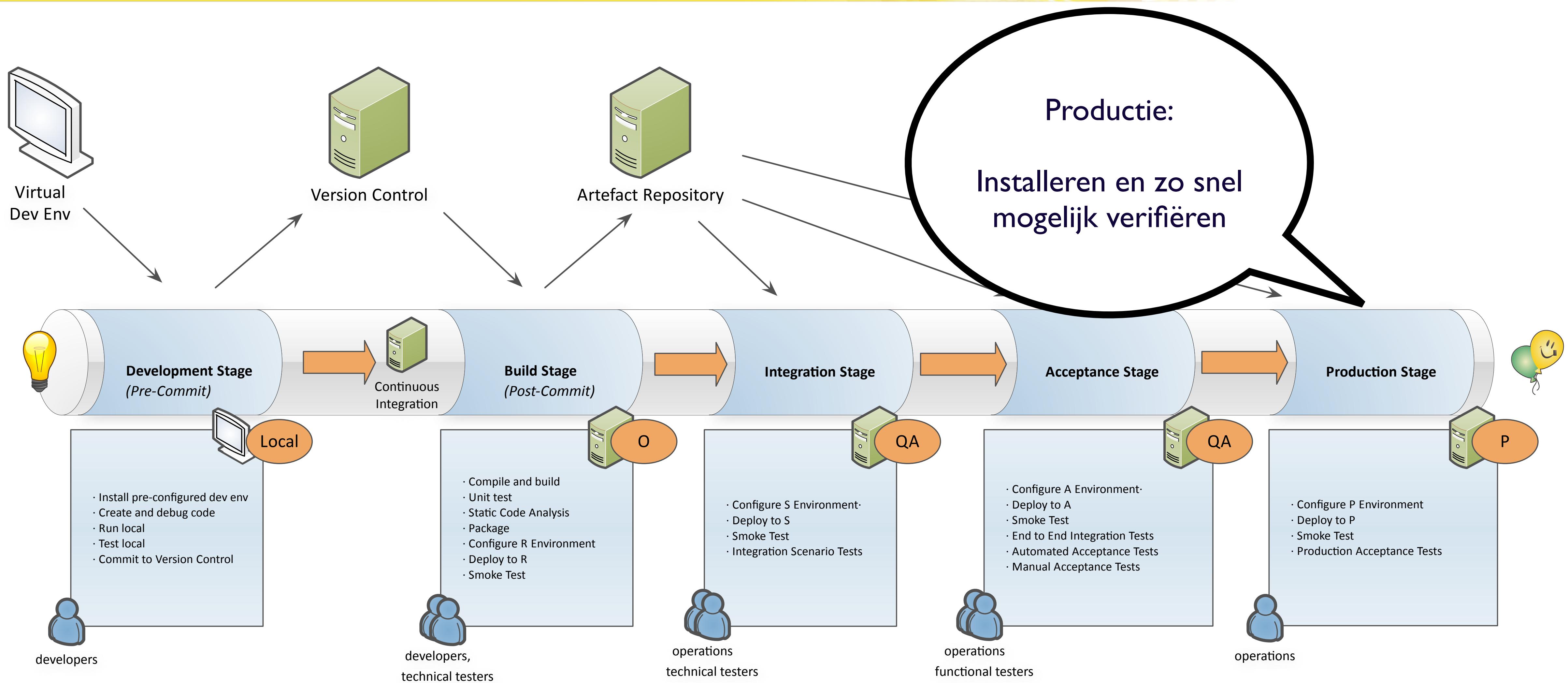


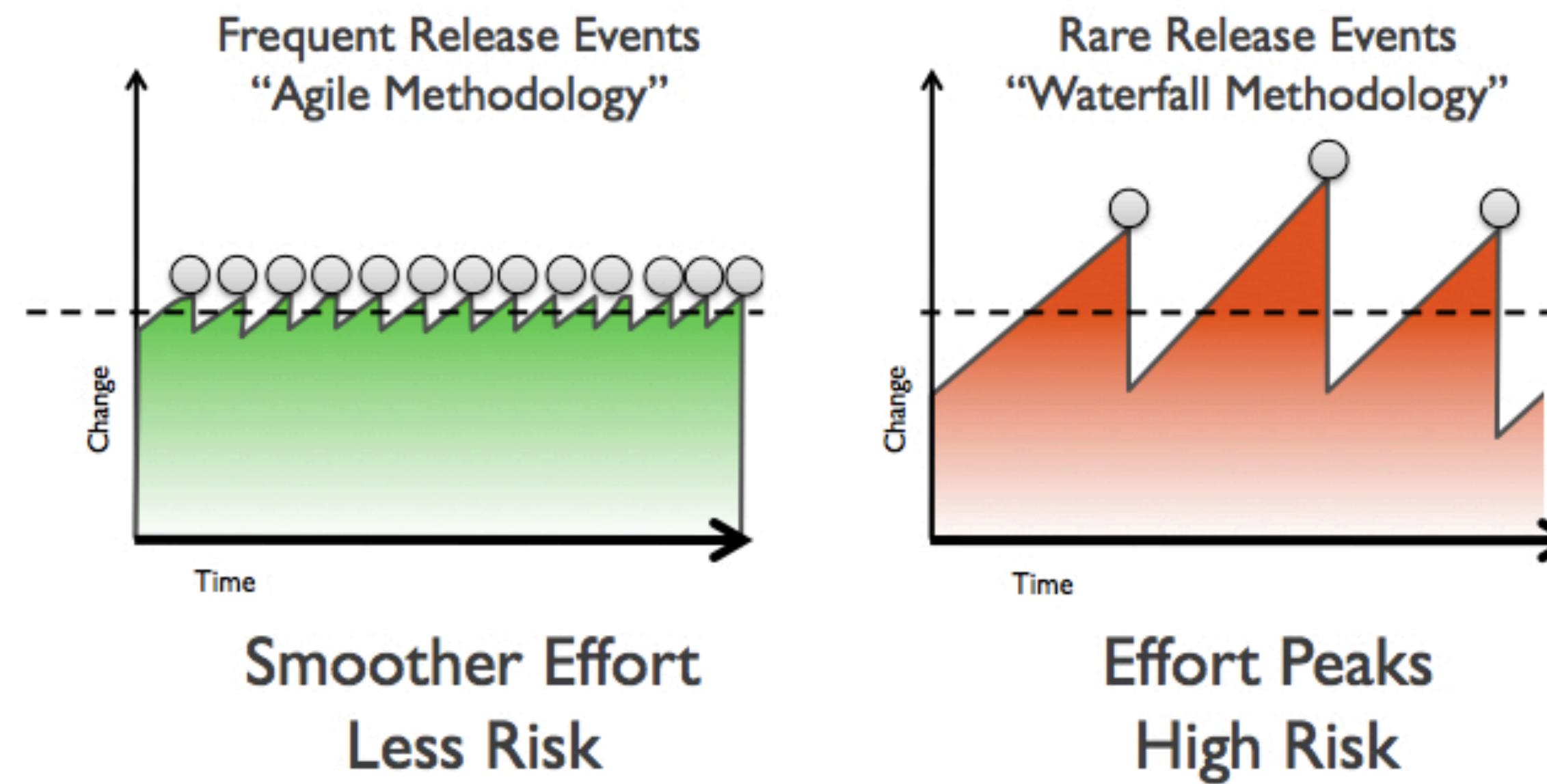
- › Automate Everything
- › If it hurts, do it more often
- › Done = Live!
- › If it breaks, stop the line
- › Build quality in
- › Everybody is responsible
- › The process is reliable and repeatable
- › Keep everything in source control
- › Improve continuously











# TESTEN IN PRODUCTIE<sup>TM</sup>

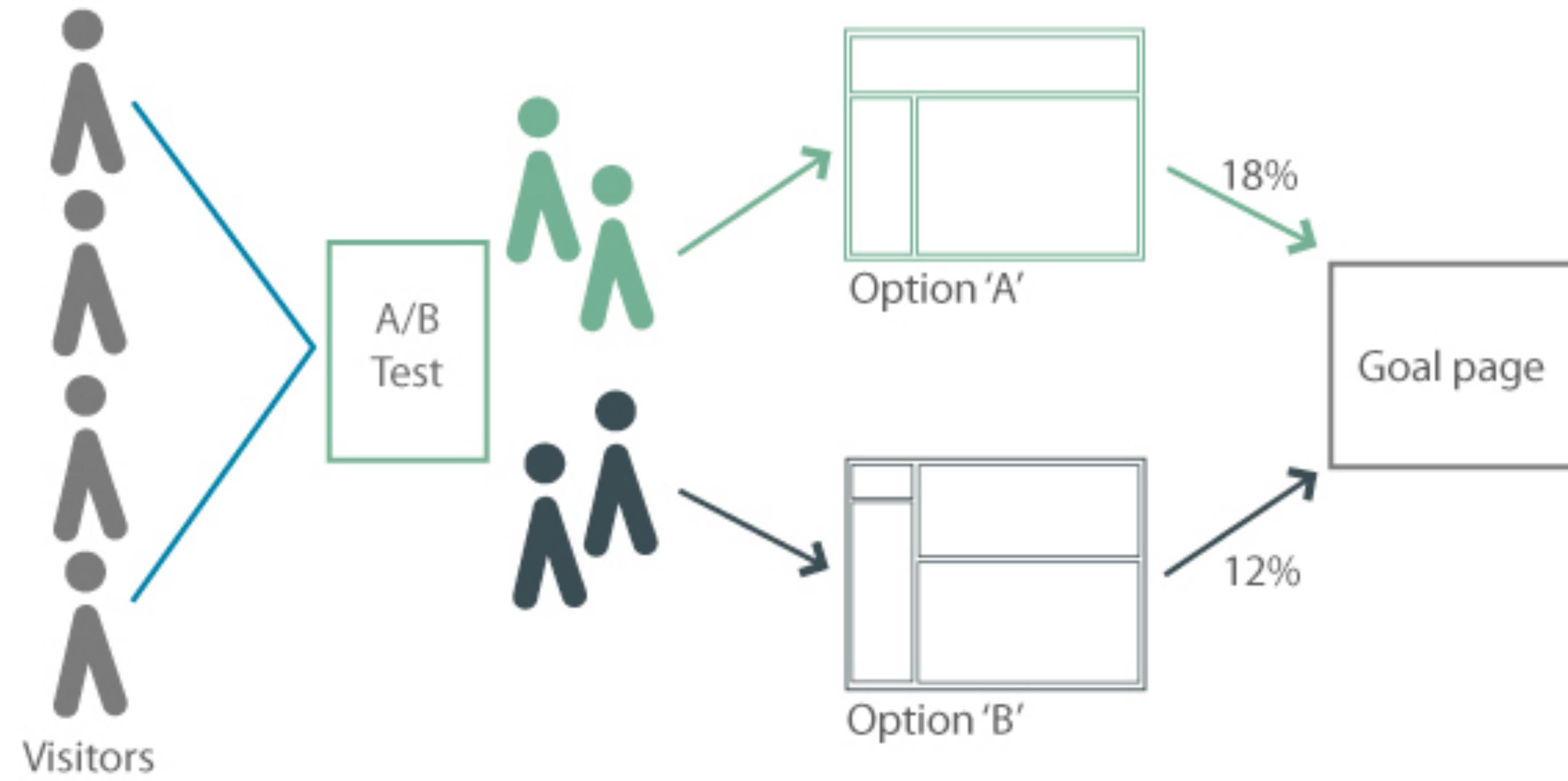
“Ja, maar....



## CANARY RELEASING



## SCHADUW DRAAIEN



## A/B TESTING

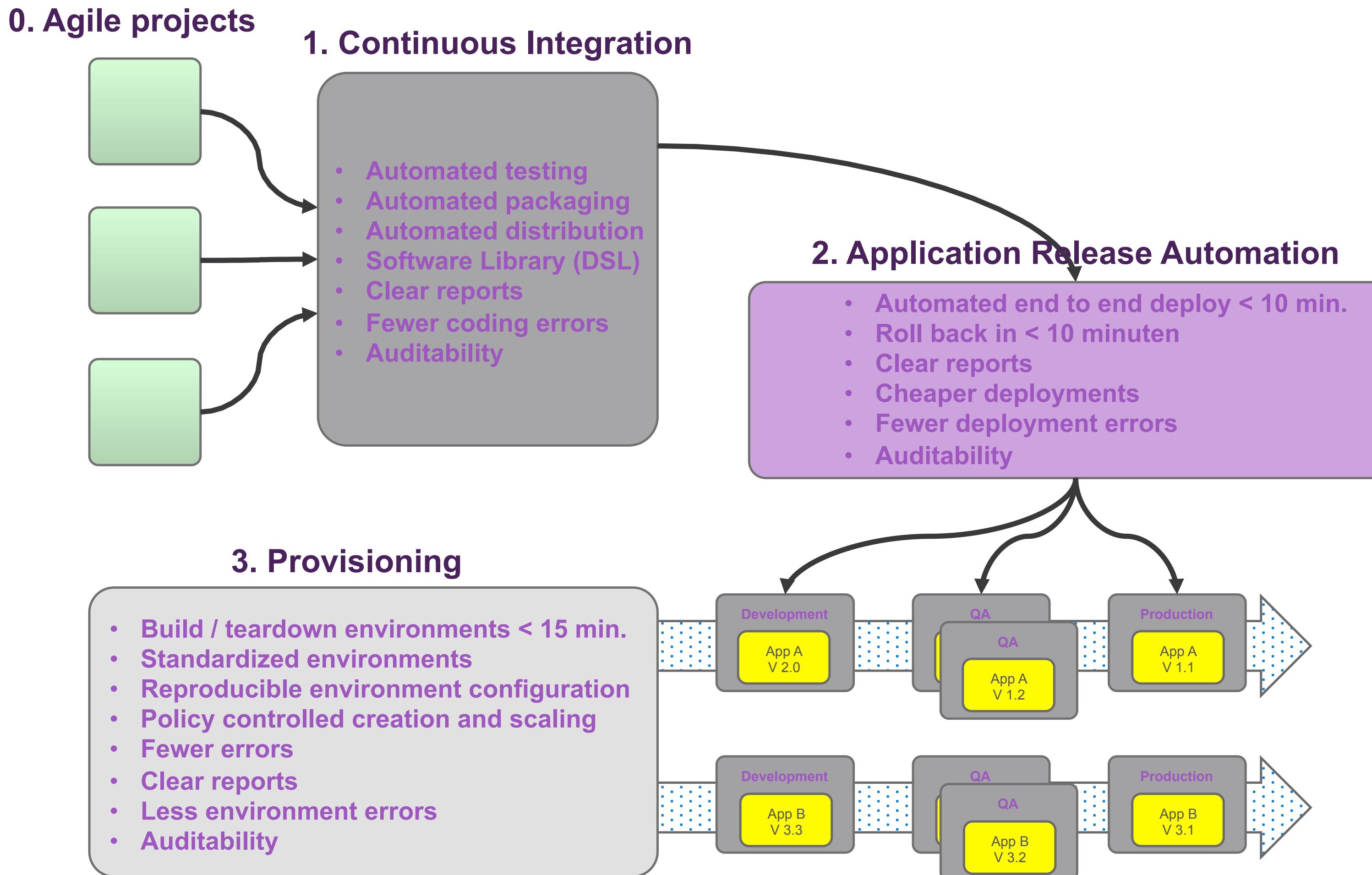


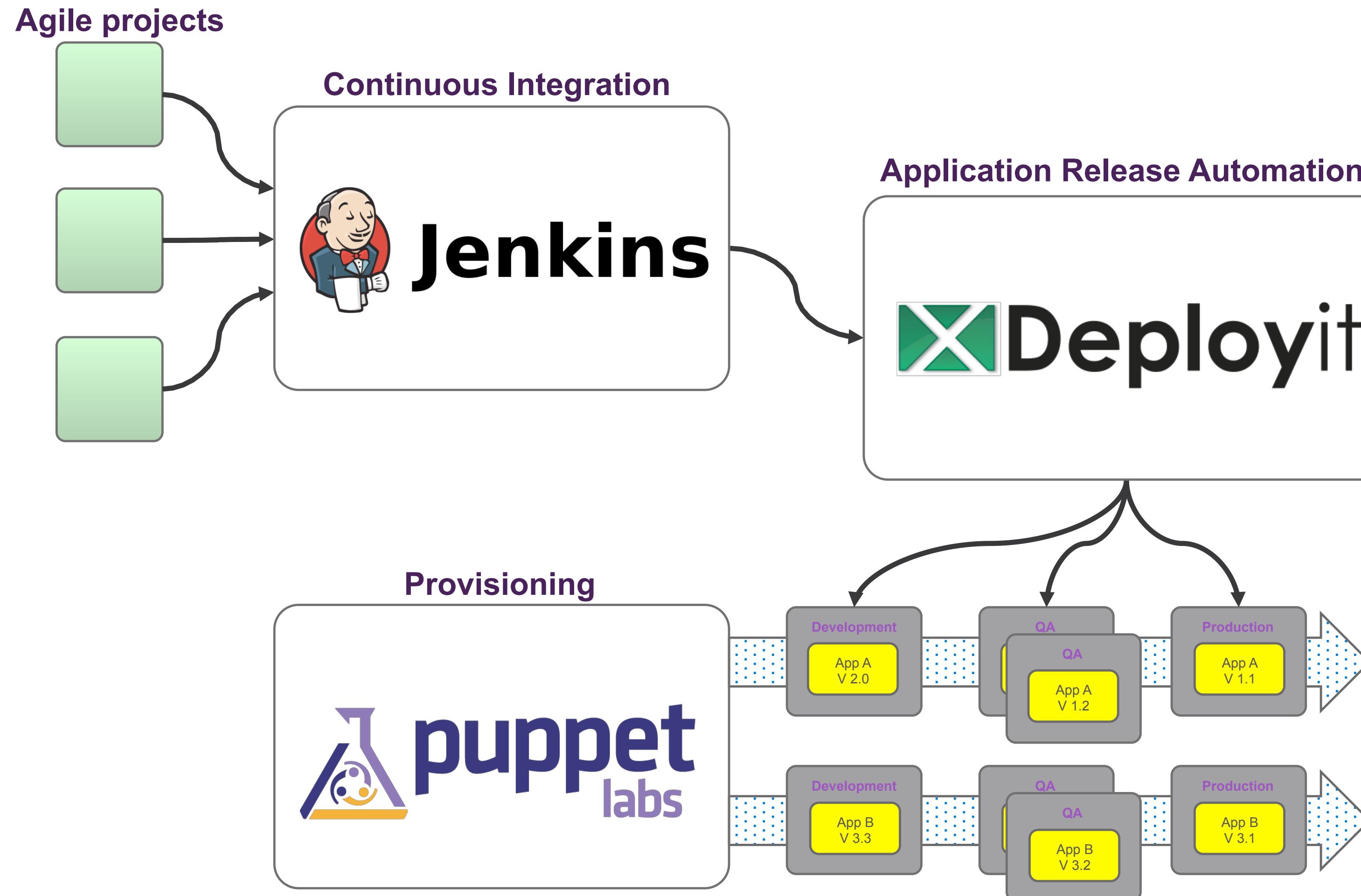
## LIVE CONVERSION MONITORING



## LIVE REVENUE MONITORING

# HOE KOM IK DAAR?





## EVALUATIE



**[HTTP://BIT.LY/XC\\_SCHRAP](http://bit.ly/xc_schrap)**