

Windows Containers

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Quintor



Inhoud

Quintor

Containers

Geschiedenis

Windows
Containers

Docker

Images

Dockerfile

Docker build

Getting up to speed

Docker

Docker run

Registry

Continuous Delivery

De toekomst

Flow

Build agent

Deployment
automation

Configuratie

Clustering

Composing

Binnenkort...

Getting up to speed

Quintor



Wat zijn containers

Isolatie

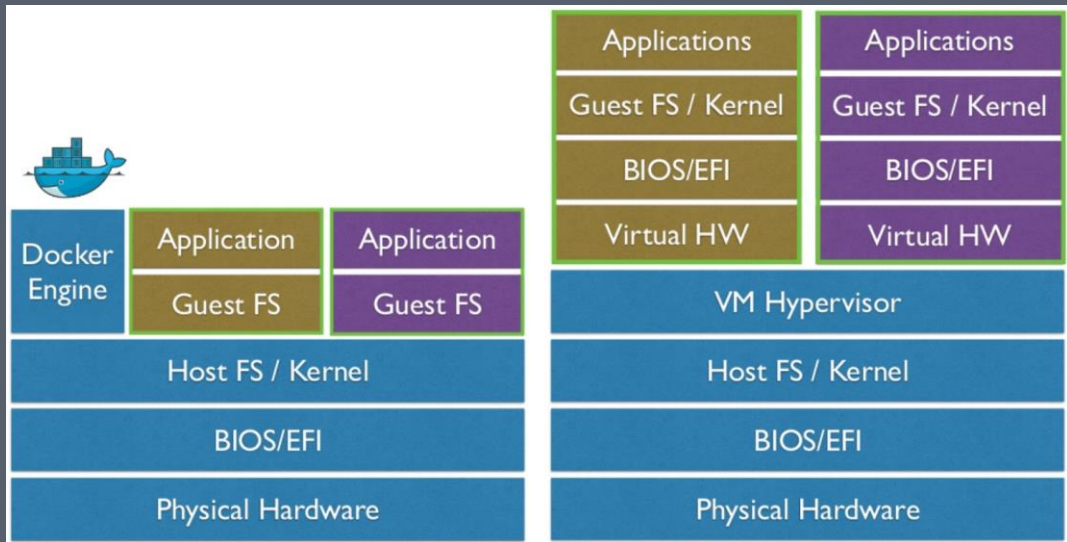
Deelt het OS

Veilig

Snel

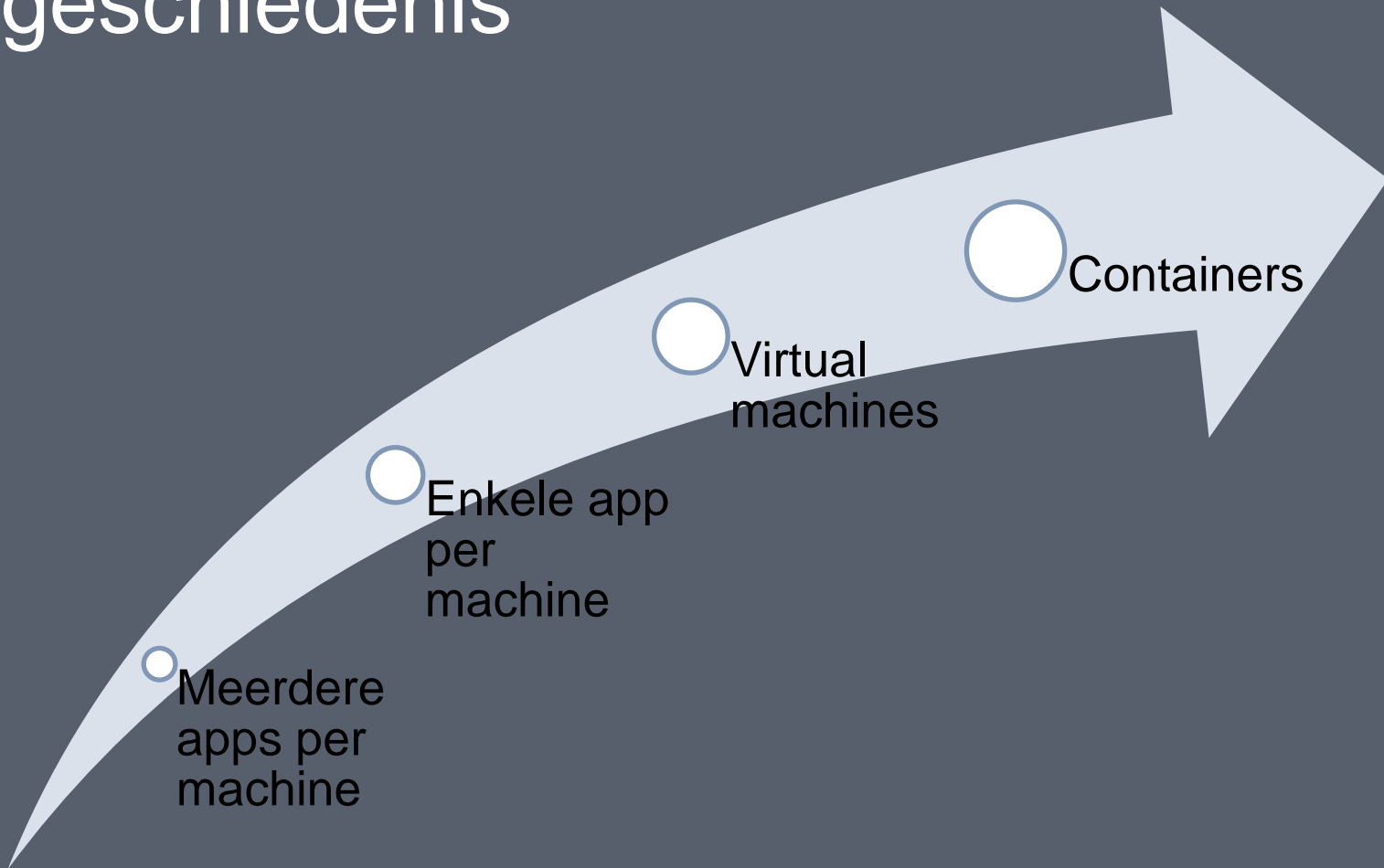
Voorspelbaar

Bewezen technology



De geschiedenis

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Windows Containers



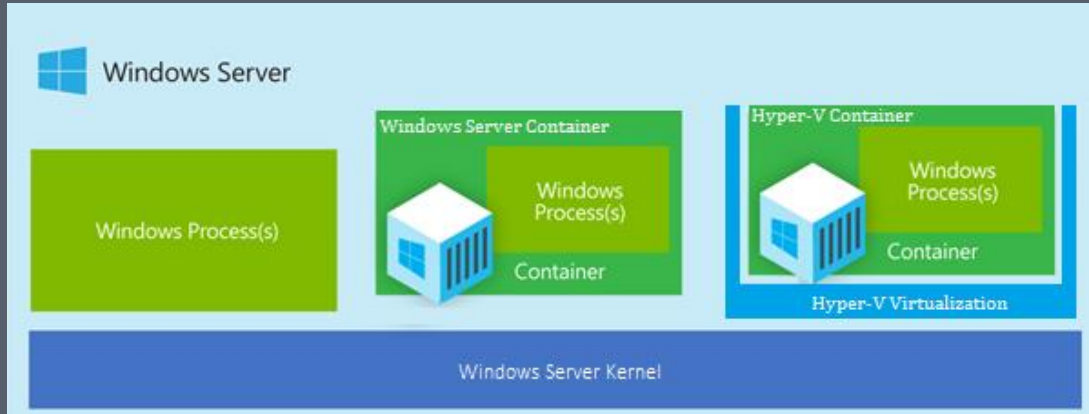
Standard

Windows Server Containers

Core

Nano

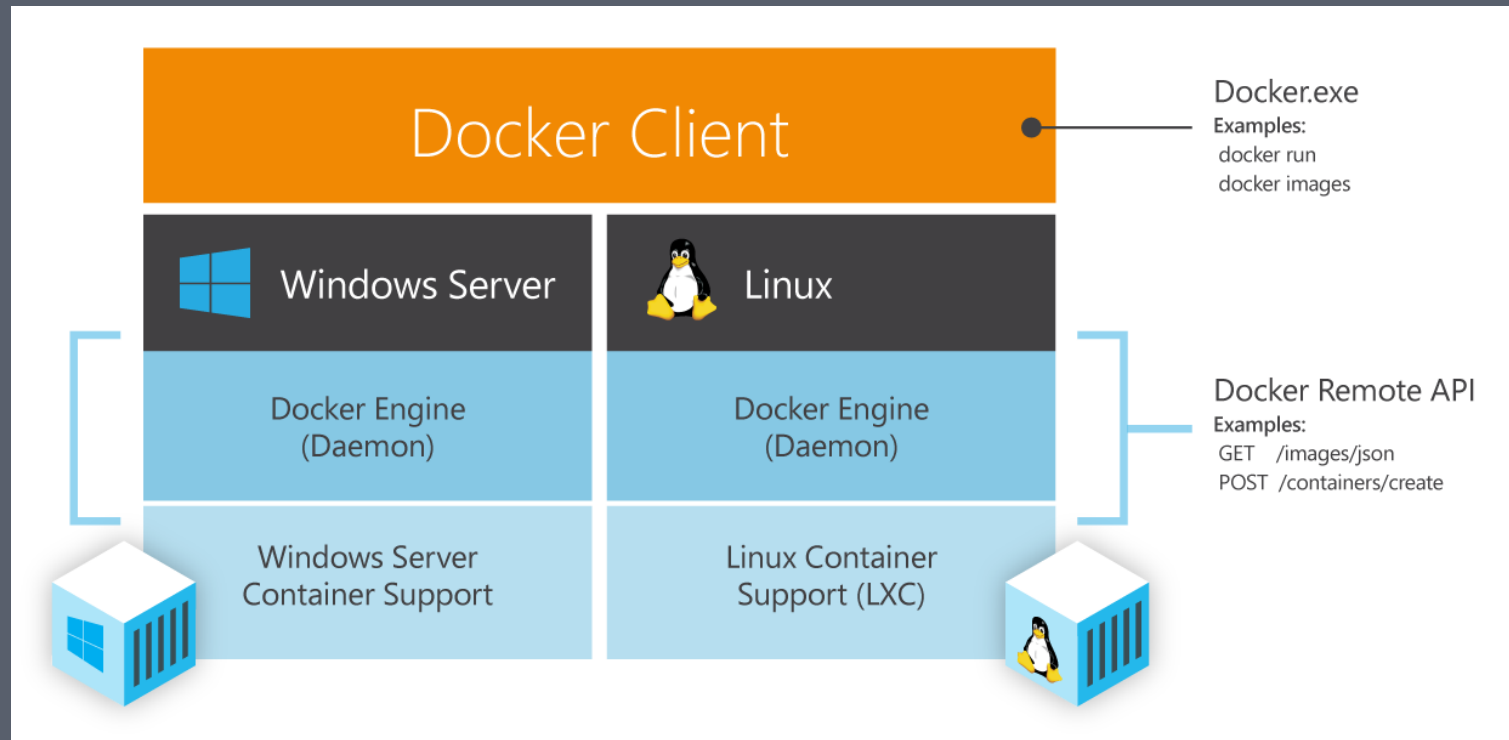
Hyper-V Containers





docker

Docker



Images

Bevat de applicatie met alle
randvoorwaarden

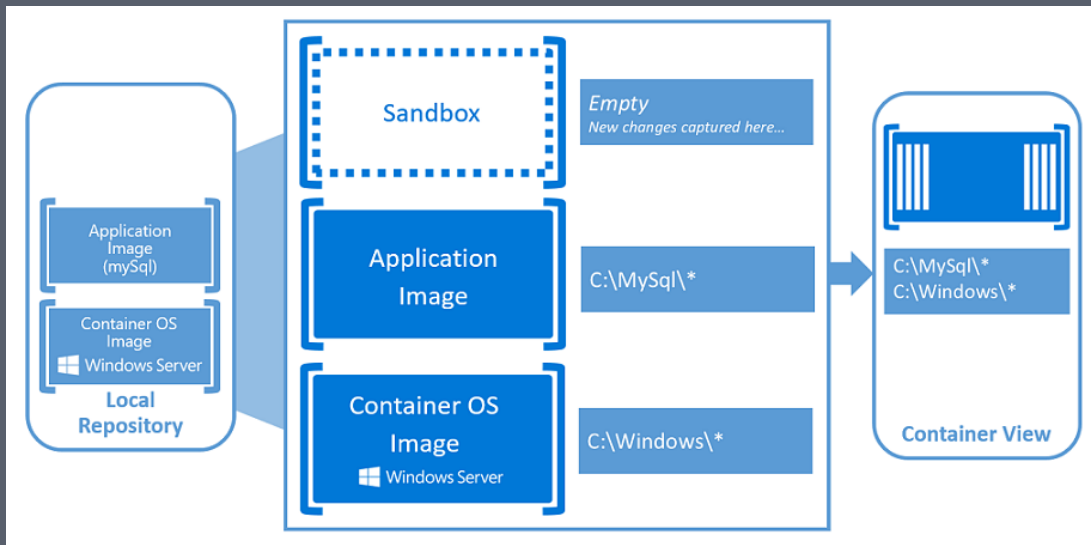
Vanaf een base image

Bevat alleen de verschillen

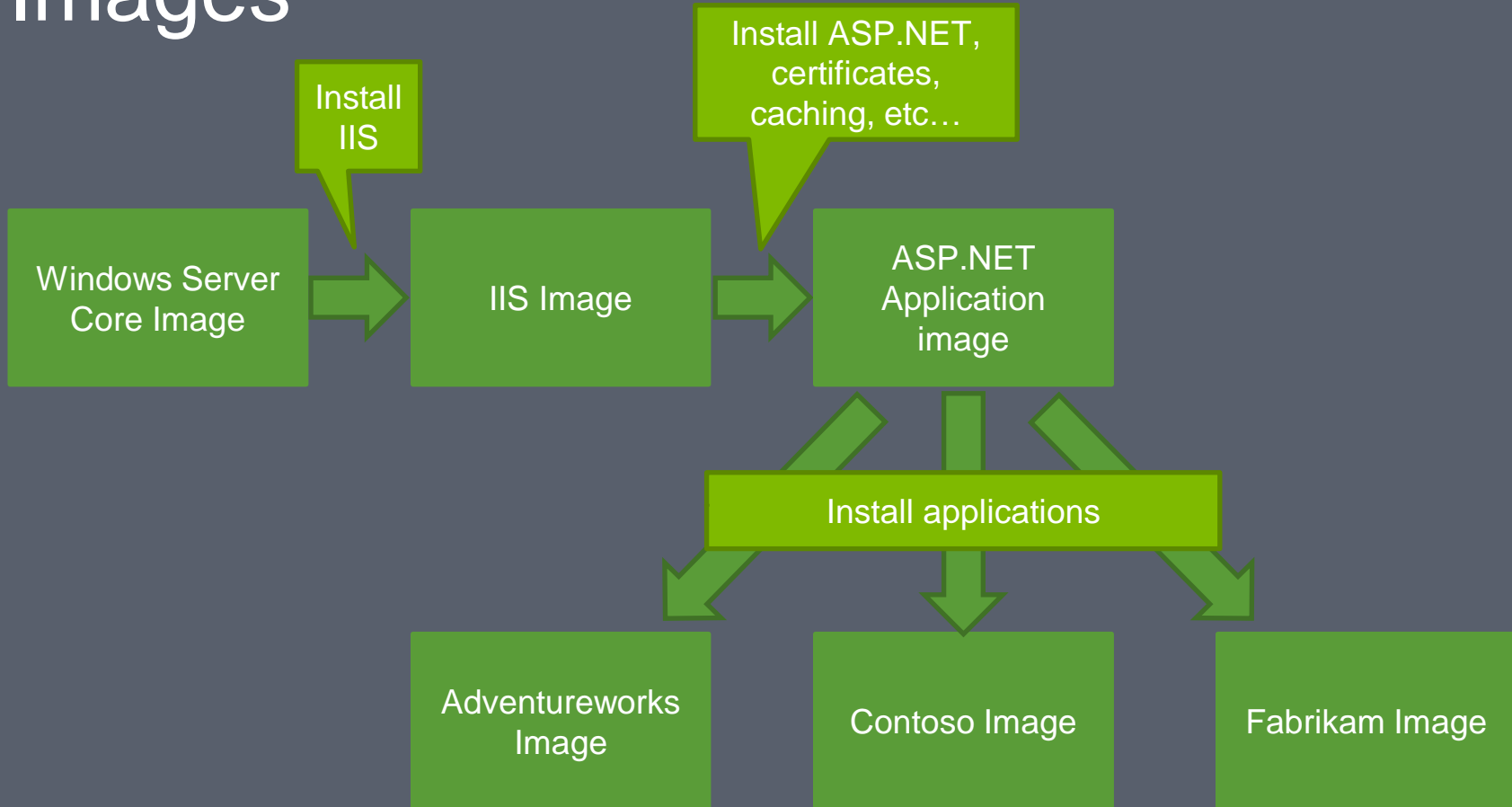
Overerven

Immutable

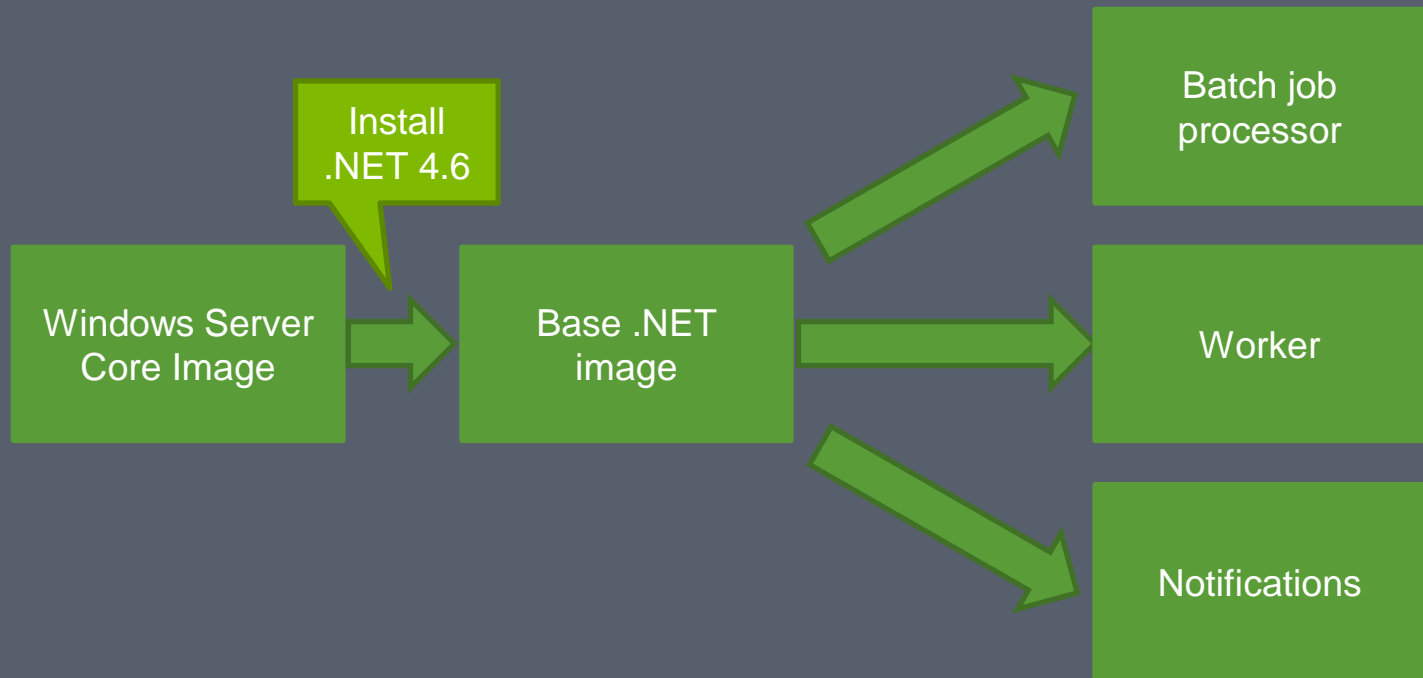
Versioned



Images



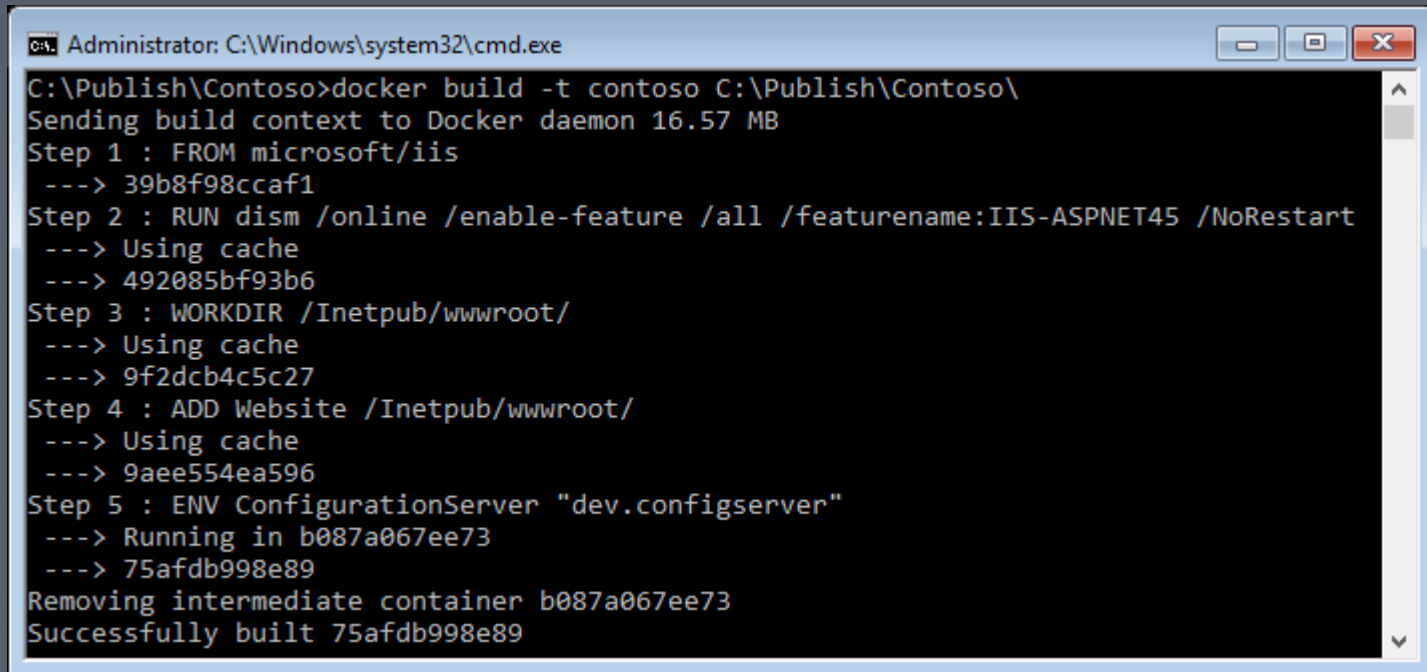
Images



.dockerignore

```
01/12/2016 11:43 AM <DIR> .
01/12/2016 11:43 AM <DIR> ..
01/12/2016 11:42 AM 69 Dockerfile
01/12/2016 11:38 AM <DIR> website
      1 File(s)          69 bytes
      3 Dir(s)  8,189,538,304 bytes free
```

Docker build



```
Administrator: C:\Windows\system32\cmd.exe
C:\Publish\Contoso>docker build -t contoso C:\Publish\Contoso\
Sending build context to Docker daemon 16.57 MB
Step 1 : FROM microsoft/iis
---> 39b8f98ccaf1
Step 2 : RUN dism /online /enable-feature /all /featurename:IIS-ASPNET45 /NoRestart
---> Using cache
---> 492085bf93b6
Step 3 : WORKDIR /Inetpub/wwwroot/
---> Using cache
---> 9f2dc4c5c27
Step 4 : ADD Website /Inetpub/wwwroot/
---> Using cache
---> 9aee554ea596
Step 5 : ENV ConfigurationServer "dev.configserver"
---> Running in b087a067ee73
---> 75afdb998e89
Removing intermediate container b087a067ee73
Successfully built 75afdb998e89
```

Docker run

Detached/Interactive

Resource constraints

Configuratie

Isolatie

Override dockerfile

Image versie

```
Administrator: C:\Windows\system32\cmd.exe

C:\Users\DockerBuilder>docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             VIRTUAL SIZE
contoso              latest              899abec37054       37 seconds ago     244.2 MB
microsoft/iis        latest              39b8f98ccaf1       9 weeks ago        169.8 MB
windowsservercore    10.0.10586.0       6801d964fda5       11 weeks ago       0 B
windowsservercore    latest              6801d964fda5       11 weeks ago       0 B
dockertest           latest              6801d964fda5       11 weeks ago       0 B
arjan                latest              6801d964fda5       11 weeks ago       0 B
atbrinke/arjan       latest              6801d964fda5       11 weeks ago       0 B
nanoserver            latest              8572198a60f1       11 weeks ago       0 B
nanoserver            10.0.10586.0       8572198a60f1       11 weeks ago       0 B

C:\Users\DockerBuilder>docker run --rm -it -p 80:80 microsoft/iis cmd_
```


Registry

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Repository voor images

Docker Hub

Private repository

Official repositories

search

pull

push

tag

login

24/7
365

Continuous Delivery

Principles behind the Agile Manifesto

We follow these principles:

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

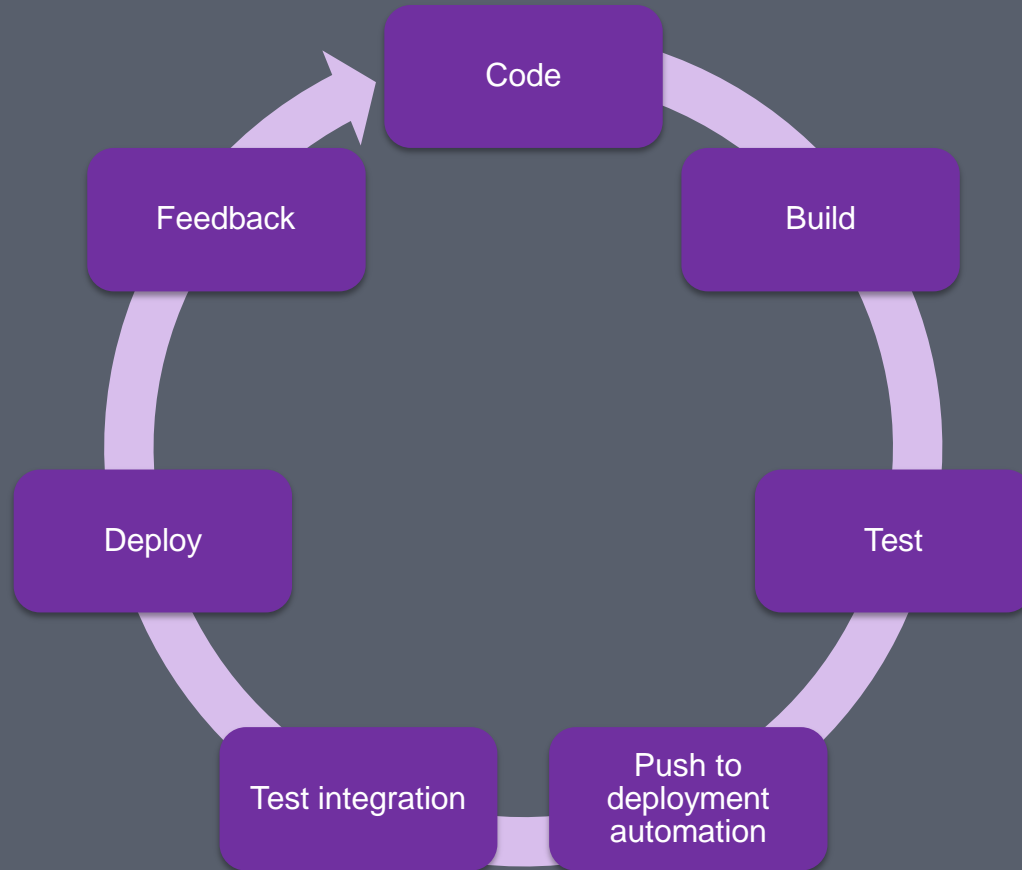
Business people and developers must work together daily throughout the project.

Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

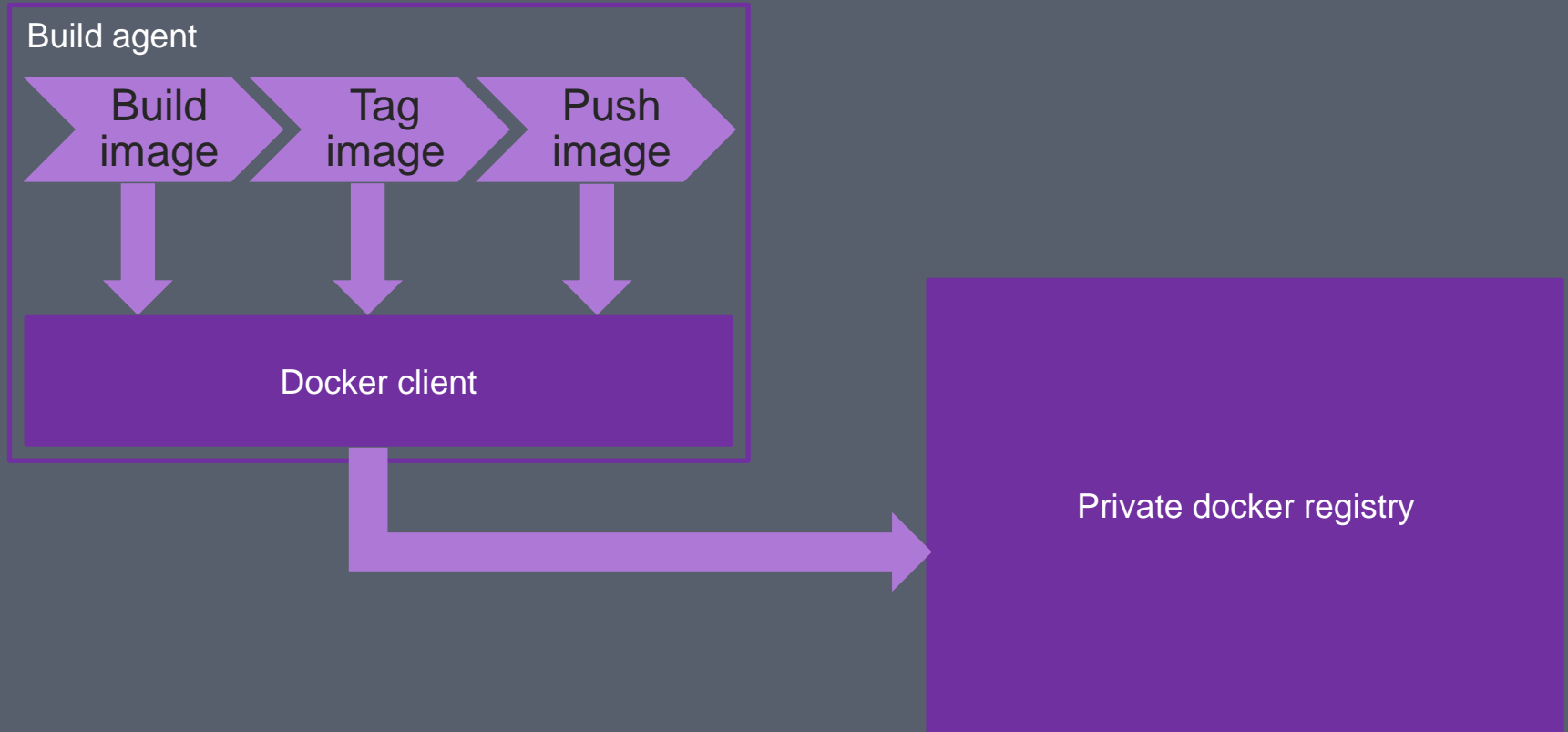
The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Deployment is moeilijk

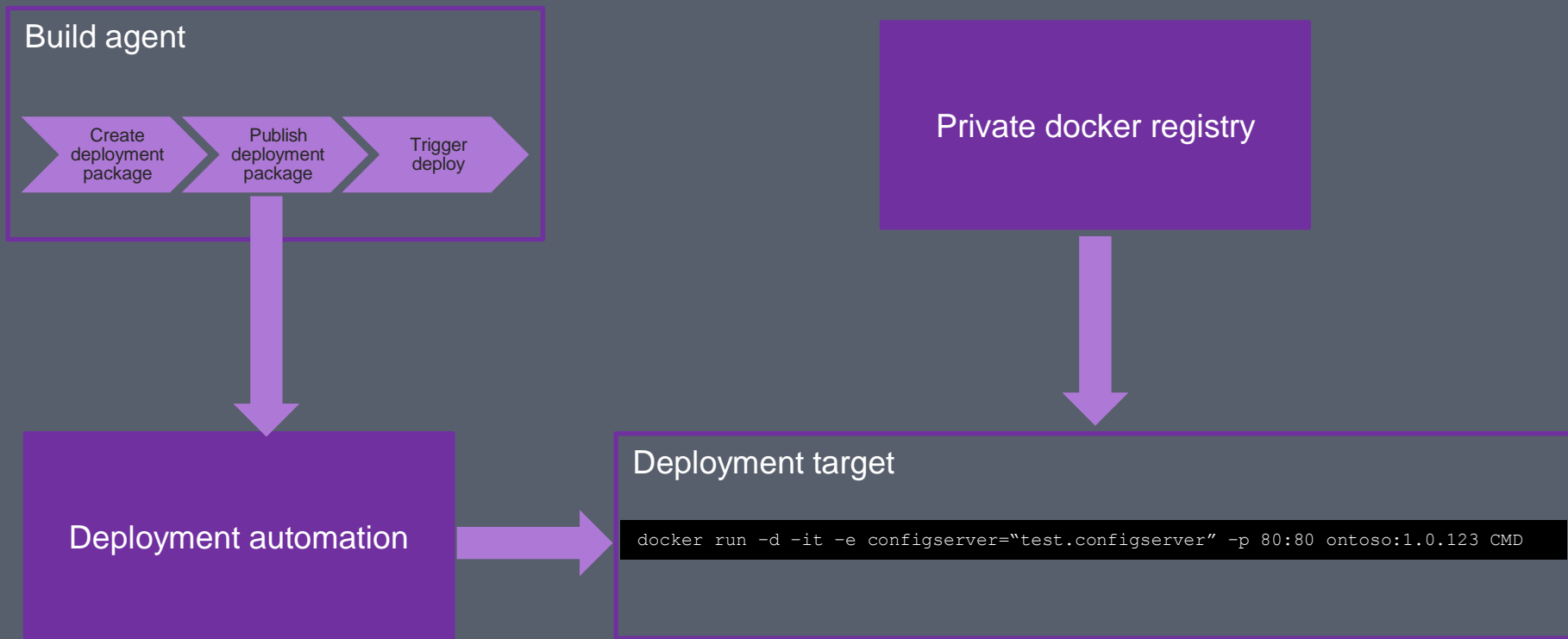
Flow



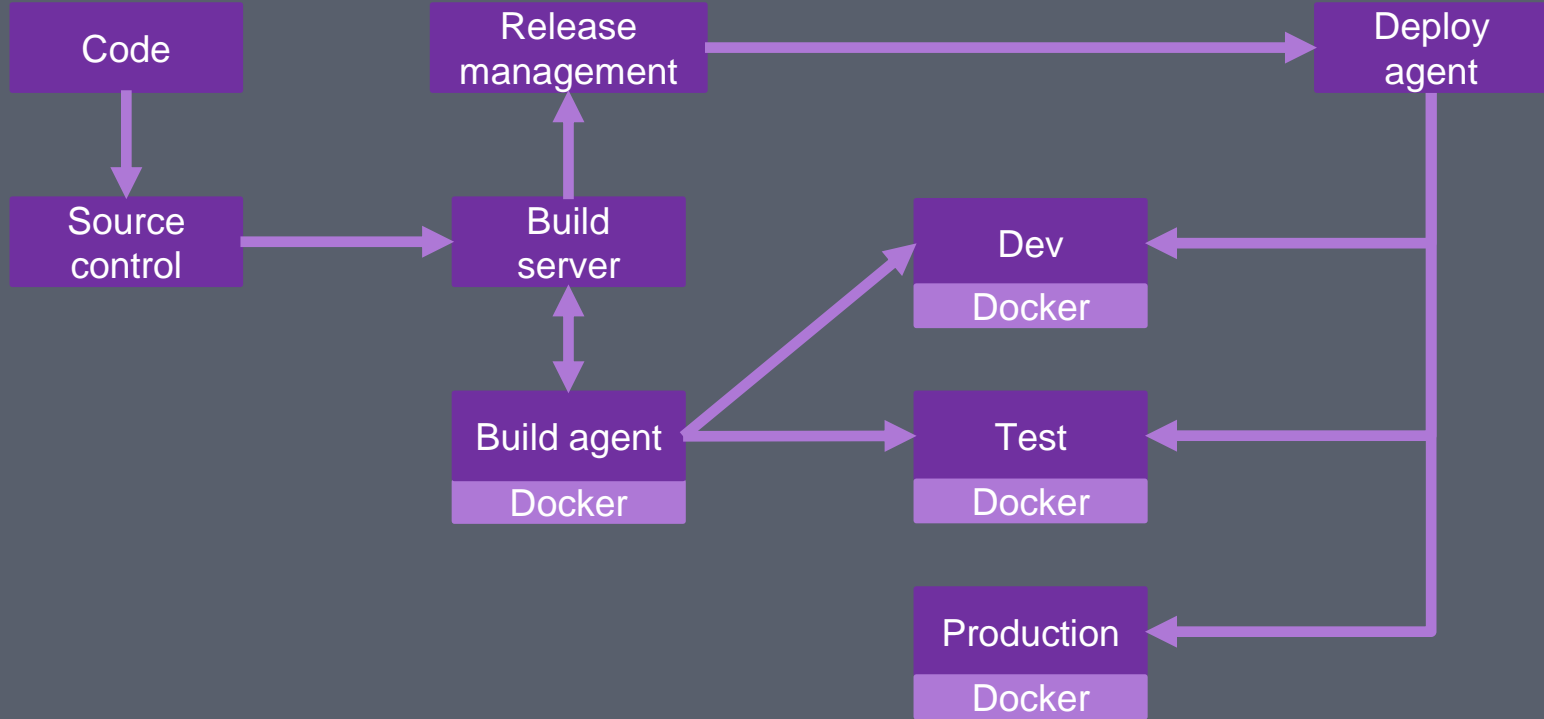
Build



Deployment



Huidige status



Configuratie

De juiste config server voor de omgeving

Min mogelijk configuratie in deployment automation tool

Niet voor developers

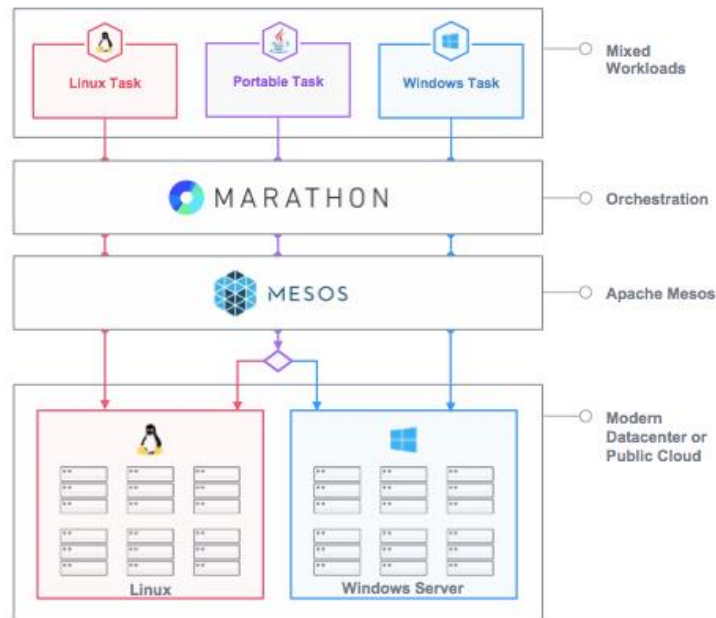
The Future

NEXT EXIT

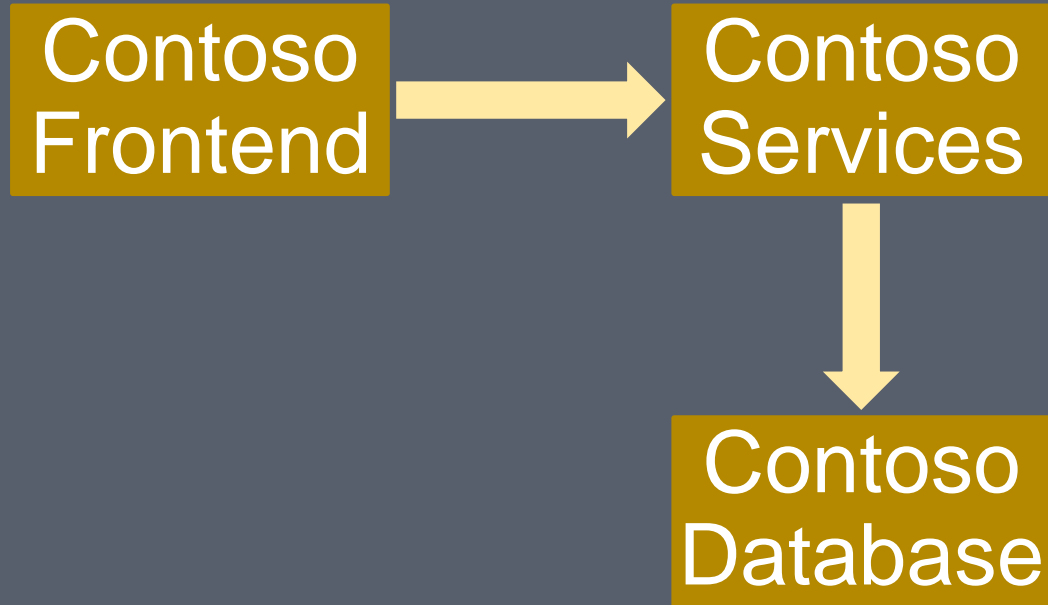


Clustering

Apache Mesos on Windows Server

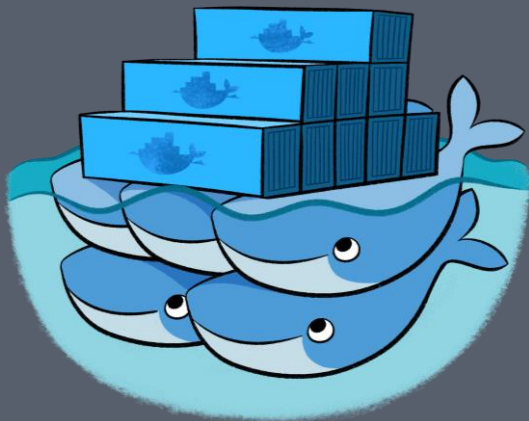
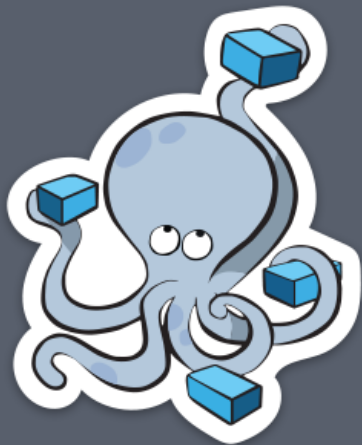


Composition



Binnenkort bij jou in je datacenter?

Quintor



Zelf proberen?

- Microsoft documentatie
 - https://msdn.microsoft.com/virtualization/windowscontainers/containers_welcome
- Work in progress
 - https://msdn.microsoft.com/virtualization/windowscontainers/about/work_in_progress
- Complete Mesos setup in Azure deployen
 - <https://github.com/Azure/azure-quickstart-templates/tree/master/mesos-swarm-marathon>

Vragen?

perfect
strangers?

