

3

# DOCKER FROM HUH TO WOW!

GO TO: [HTTPS://KAHOOT.IT/LOS](https://kahoot.it/los)

ENTER CODE:

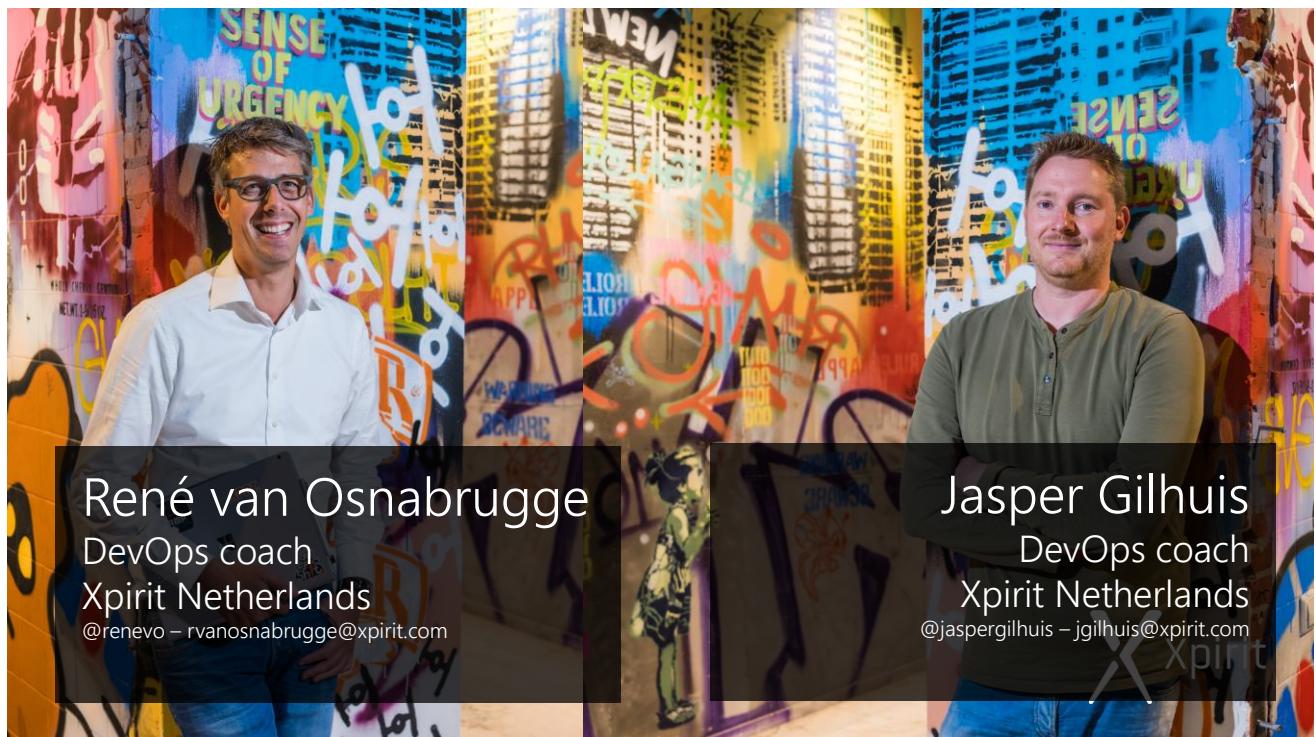
JASPER GILHUIS  
RENÉ VAN OSNABRUGGE

TechDays  
Discover endless possibilities 2017

Xpirit

@JASPERGILHUIS  
@RENEVO

Microsoft



Introduction and Explanation

Navigate to: <https://kahoot.it>

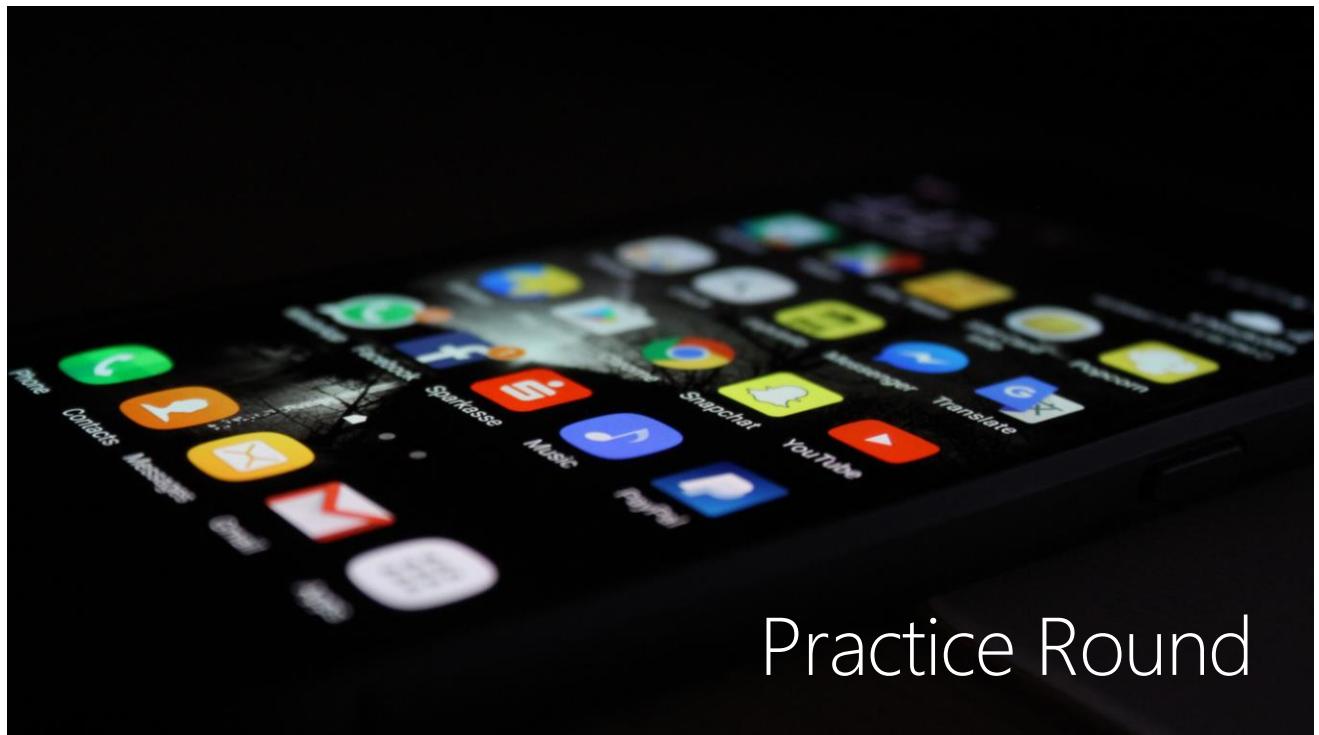
Enter Game PIN

Enter your name



Lets play 4 rounds!

Practice Round



Get ready for a question...

Join the game on <https://kahoot.it>  
Enter game PIN  
Enter name

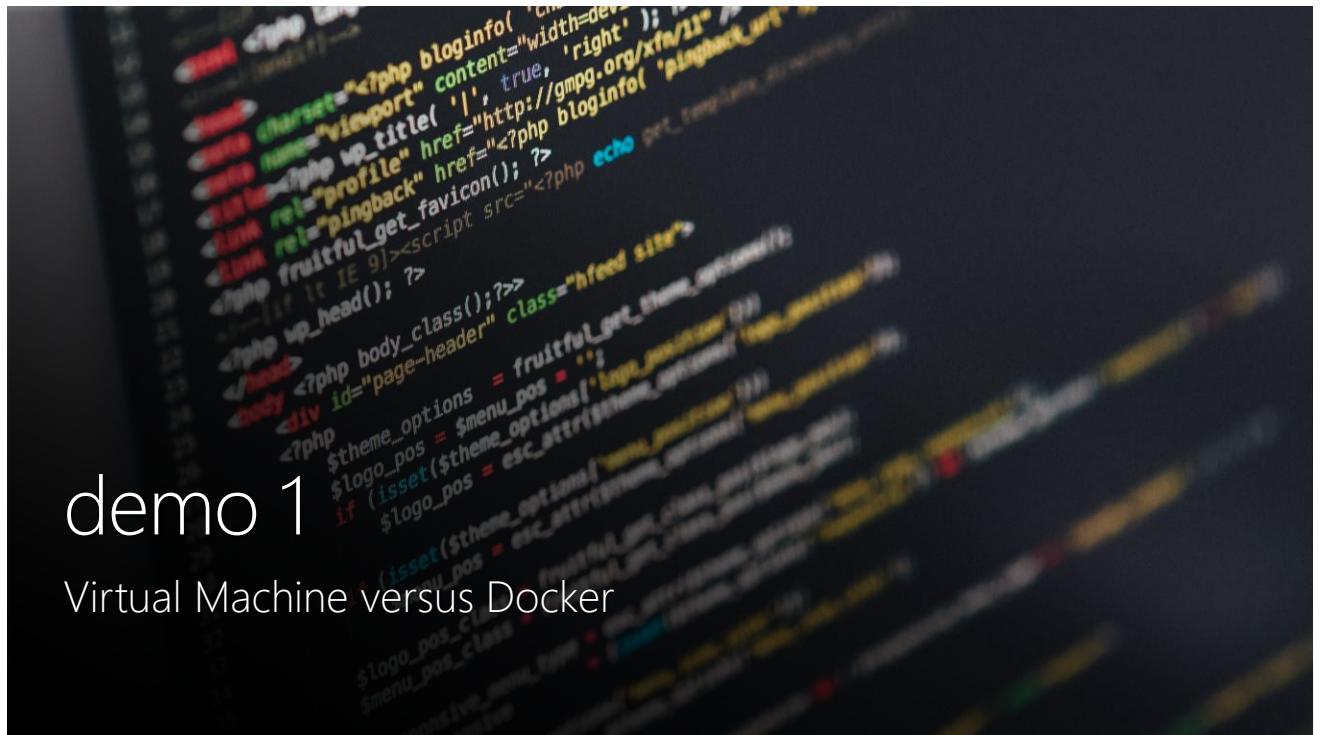
1

What event are you attending today?

- DockerCon
- VS Live
- Techdays
- Xpirit Meetup



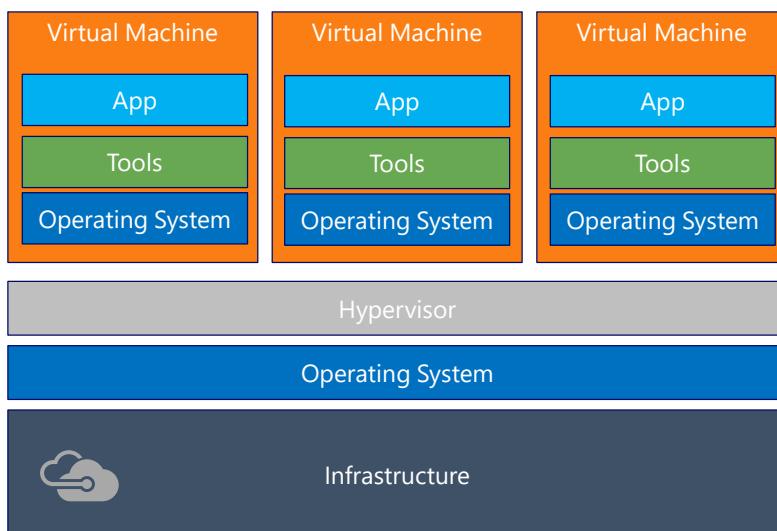
## ROUND 1 CONCEPTS



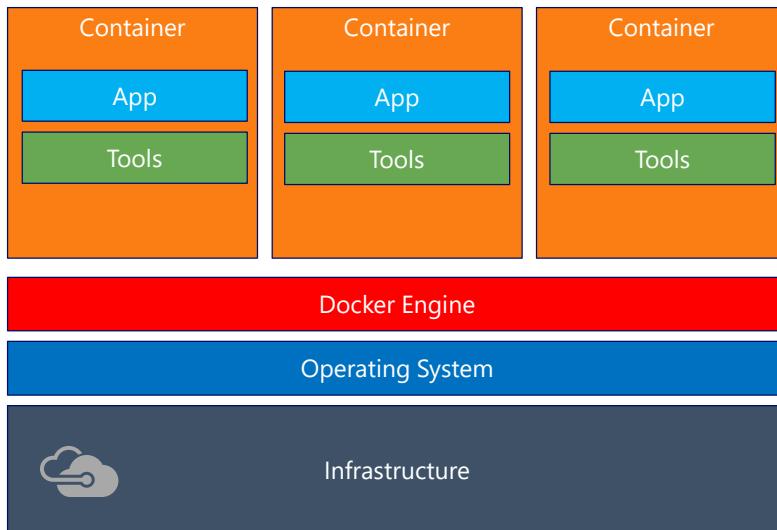
# What is the main difference between a VM and a container?

- ▲ Container does not include its own operating system
- ◆ Container cannot have own IP Address
- Container is always smaller
- VM is easier to move around

## Virtual Machines



# Versus Containers



A Linux container can run on

- ▲ All hosts no matter the OS
- ◆ Only Linux hosts
- Only Windows hosts
- Linux hosts and on some Windows hosts as Hyper-V container



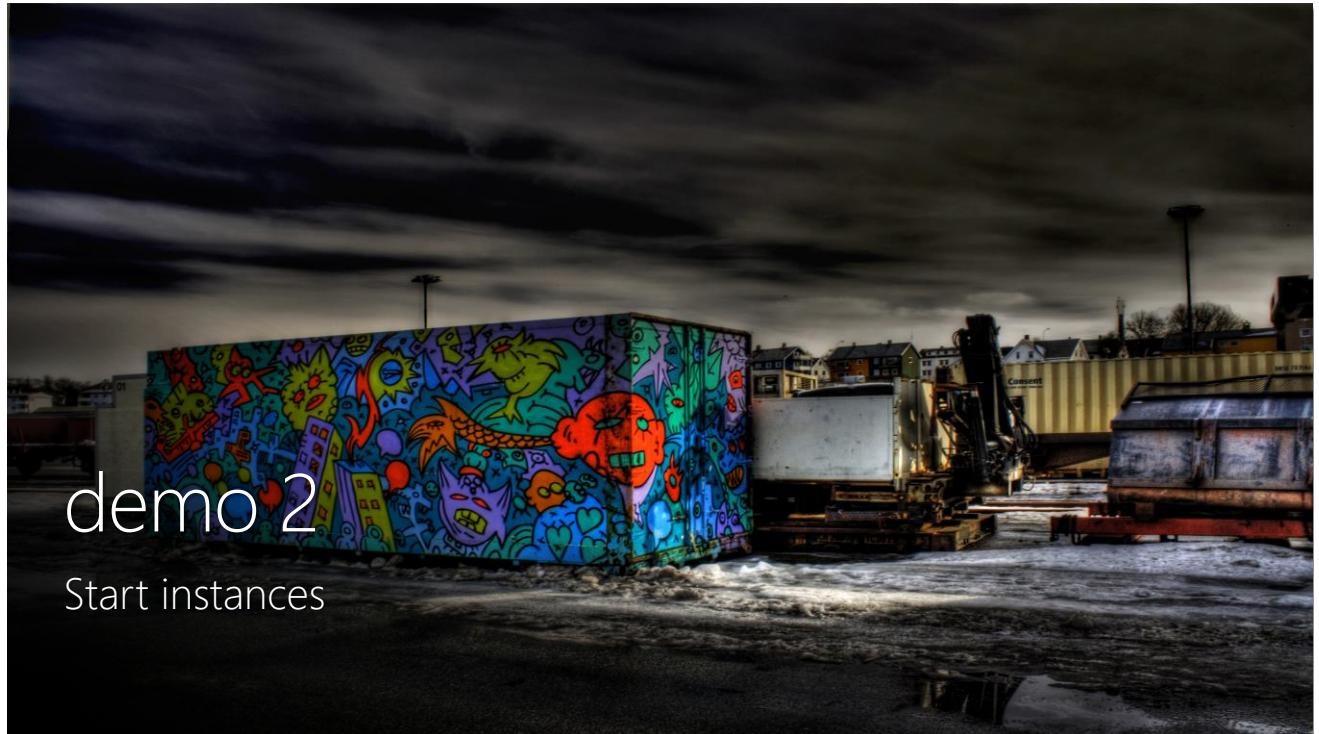
## A container image is ...

- ▲ A running instance of a container
- ◆ A blueprint for new containers
- An ISO file of a container
- A picture of a container



## Concepts





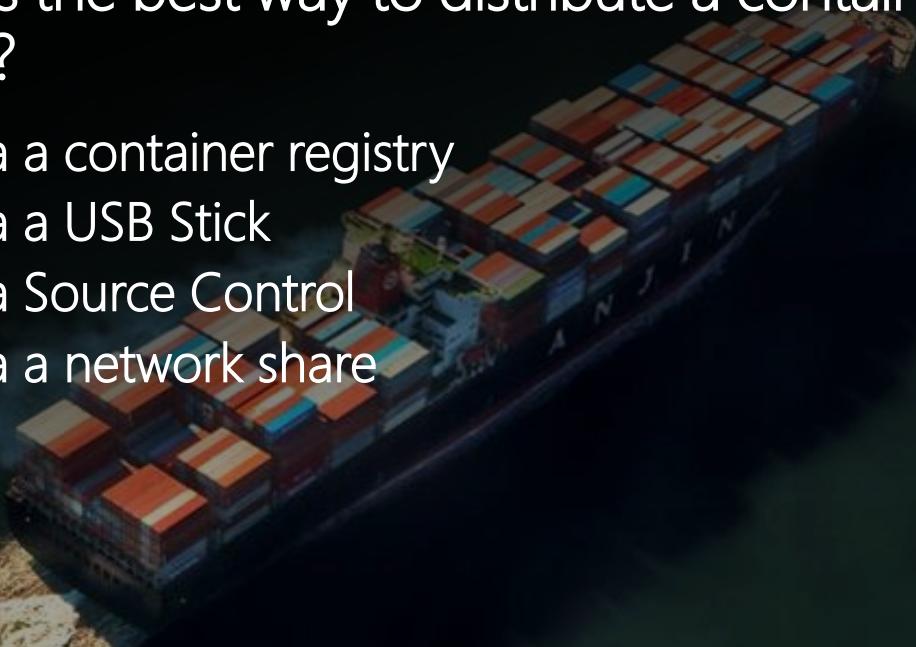
# ROUND #1 WINNER IS...



Please collect your prize after the session!

## What is the best way to distribute a container image?

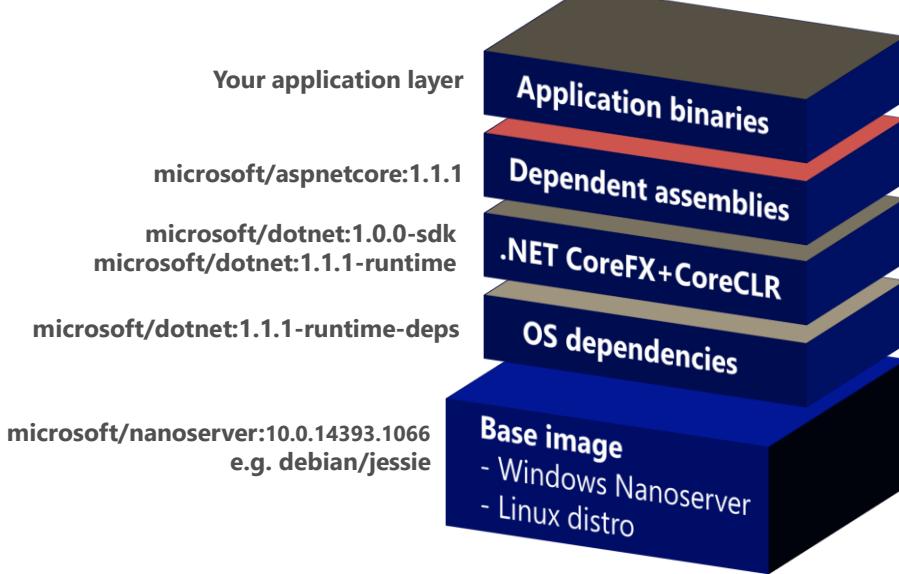
- ▲ Via a container registry
- ◆ Via a USB Stick
- Via Source Control
- Via a network share



# How to create a new container image?

- ▲ Docker file
- ◆ Build on top of a new container
- All of the above

## Docker Image Layers



## demo 4

Docker file and layers

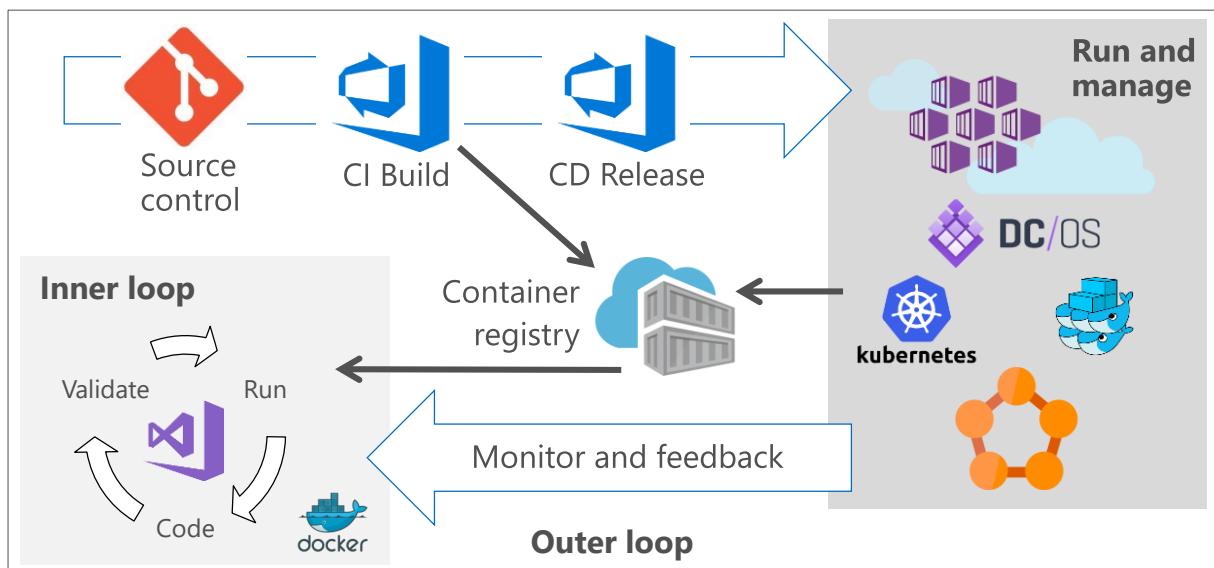
A container image contains

- ▲ Everything to run an application
- ◆ Application code only
- Infrastructure code only
- No data

# What is a Container Bakery?

- ▲ The factory where they make containers
- ◆ A build pipeline that produces and publishes an image
- A process that starts container
- An orchestrator that manages multiple containers

## Developer Workflow





demo 5

Container Bakery



**ROUND 3**

**DOCKER COMMANDS**

# ROUND #2 WINNER IS...



Please collect your prize after the session!

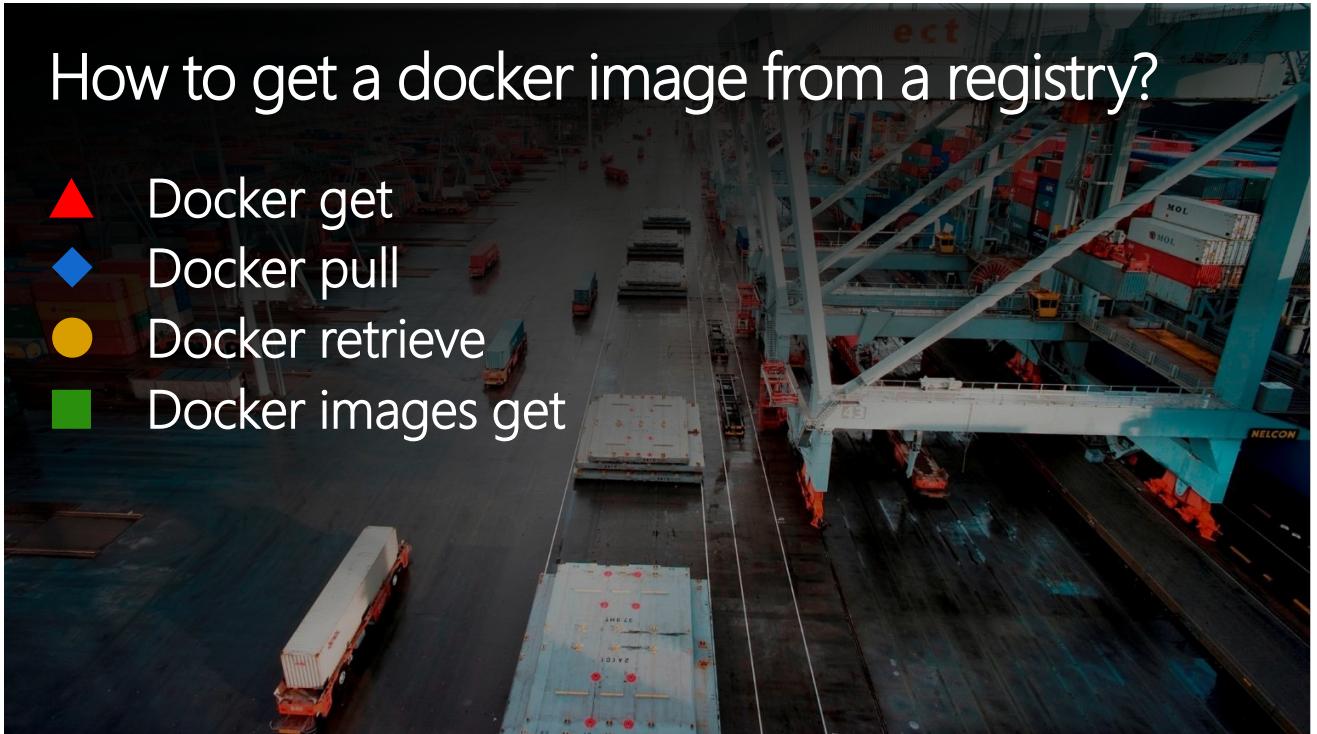
## How to find a docker image in a registry?

- ▲ Docker images find <name>
- ◆ Docker find <name>
- Docker grep <name>
- Docker search <name>



## How to get a docker image from a registry?

- ▲ Docker get
- ◆ Docker pull
- Docker retrieve
- Docker images get



## How to list local available images?

- ▲ Docker list
- ◆ Docker img
- Docker images
- Docker dir



## How to display all container instances?

- ▲ Docker ps –a
- ◆ Docker ps
- Docker ls
- Docker view

## How to create a container image from a file?

- ▲ Docker Build
- ◆ Docker Create
- Docker Image
- Docker Make

## demo 6

Command Demo

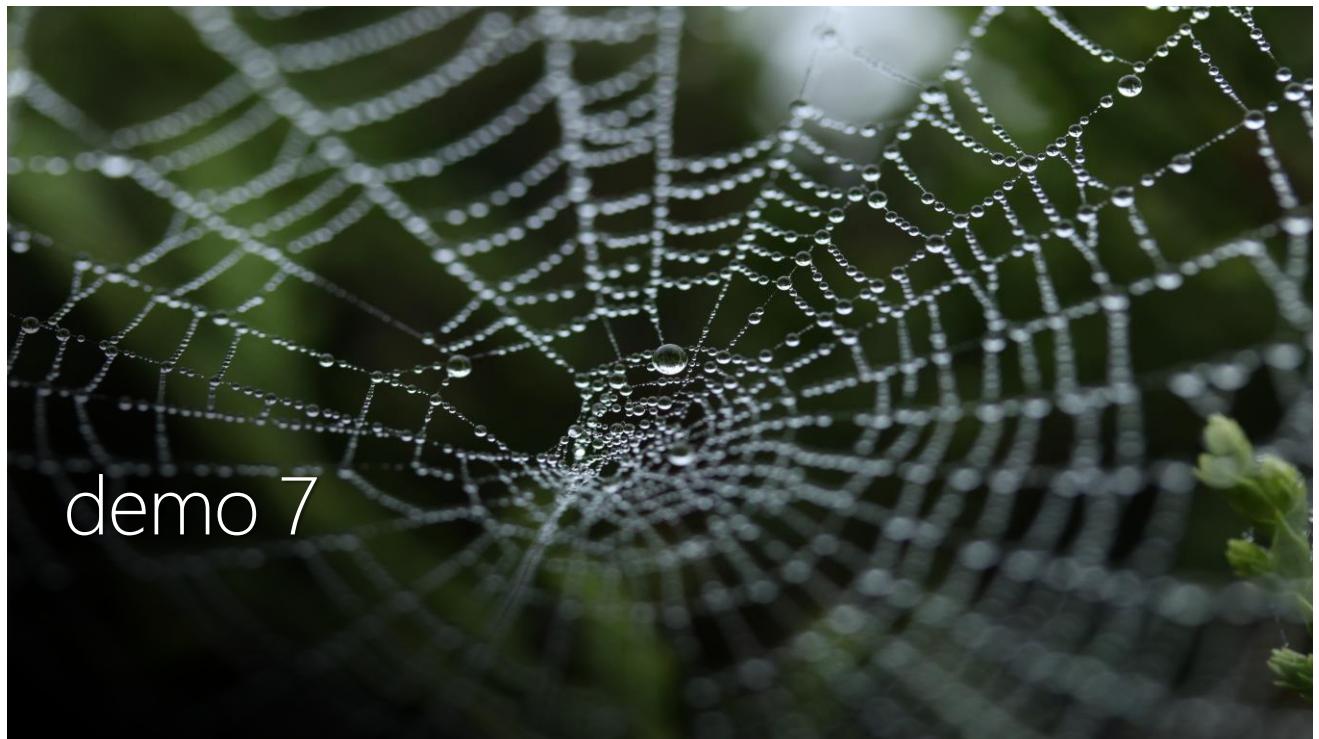


ROUND #3 WINNER IS...



Please collect your prize after the session!

demo 7



## What will happen *after* pushing the vote button?

- ▲ The website runs fine
- ◆ The website cannot find the database
- The database is not running

## Multiple containers on a host

- ▲ Are isolated and can never see each other
- ◆ Can be grouped to see each other
- Is not really recommended
- Can be attached to a Virtual network to see each other

## What happens to data in a removed container?

- ▲ Files are kept, process are lost
- ◆ Files and process are kept
- All is lost



You need a SQL Server to play. What do you do?

- ▲ Request a new SQL Server capable machine
- ◆ Download a prepared VM
- Start SQL Azure
- Start a Docker Container!





The image consists of two side-by-side photographs. Both photos show a man standing in front of a wall covered in colorful graffiti. In the left photo, a man with glasses and a white shirt is smiling. In the right photo, a man with short hair and a green shirt is also smiling. Below each photo is a dark rectangular box containing text about the individual.

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