

Annonces DockerCon 2018 - 28 June 2018,
Grenoble



Michael Bright,  @mjbright Consulting

Slides & source code at <https://mjbright.github.io/Talks>

Agenda

Tour de Table - "Connaissez-vous DockerCon?"

Schedule - Labs, Keynotes, Breakouts, Party, Hallway
Tracks ...

Keynote Announcements

Breakout Sessions - the best

Cool Hacks

DockerCon Europe, 3-5 Dec, Barcelona

Michael Bright,  @mjbright Consulting

Cloud Native Solution Architect

Trainer: Kubernetes, Serverless, Docker, CloudNative

Past researcher, dev, team lead, dev advocate

British, living in France for 25-years

Docker Community Lead, Python User Group



linkedin.com/in/mjbright



github.com/mjbright

DockerCon 2018 Schedule



DockerCon 2018 Schedule

| Agenda | Spo |
|-------------------------------|---|
| » Agenda | Upstream (Moby Project) Discussions |
| » Speakers | All week |
| » Contribute & Collaborate | DCA exams (Docker Cert. Associate, 175 euro) |
| » Hands-on Labs | Adhoc meeting groups |
| » Certification | Paid for workshops (\$300) |
| » Hallway Track | Various (inc. Docker Pals) |
| » Workshops | |
| » Persona Journey | |

Preconference Training Day

2-hour workshops, \$300

Using Istio - Lee Calcote, SolarWinds

Migrating a .Net App to Docker - Steven Follis, Docker

Migrating a Java App to Docker - Sophia Parafina, Docker

Docker Storage Concepts - Derrick Miller/Dan Finneran, Docker

Networking For Swarm And Kubernetes In Docker Enterprise Edition -
Andy Randall, Docker

Monitoring And Logging - Brian Christner, Docker

Container Troubleshooting With Sysdig - Michael DUCY, Sysdig

Secure, Automated Software Supply Chain - Andy Clemenko,
Docker

Day0: Training, Captains, Community Leaders ...

Docker Captains

↪ vdemeester 🐻 and 5 others Retweeted

Michael Irwin @mikesir87 · 18 Oct 2017

Captains, assemble! #dockercon #dockerselfie



3

17

42



Community Leaders

↪ Adrian Mouat and 1 other Retweeted

David Friedlander @i_am_davidf · Jun 13

Our #docker community leaders are just awesome! They surprised @kbajza13 with birthday flowers and a signed mug. #DockerCon



1

5

26

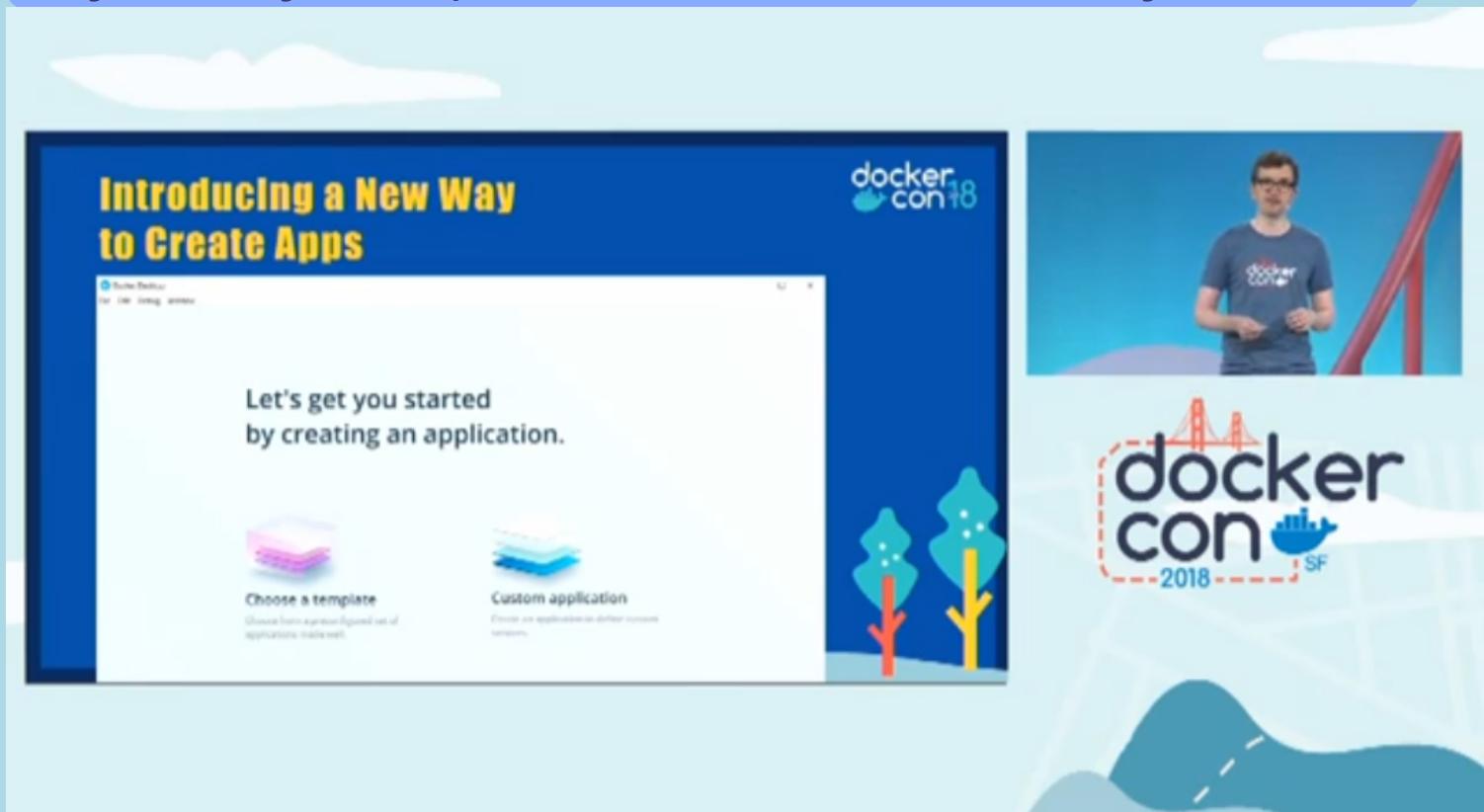


Day1: KeyNote/Breakouts, Community Theatre

2hr Keynote:

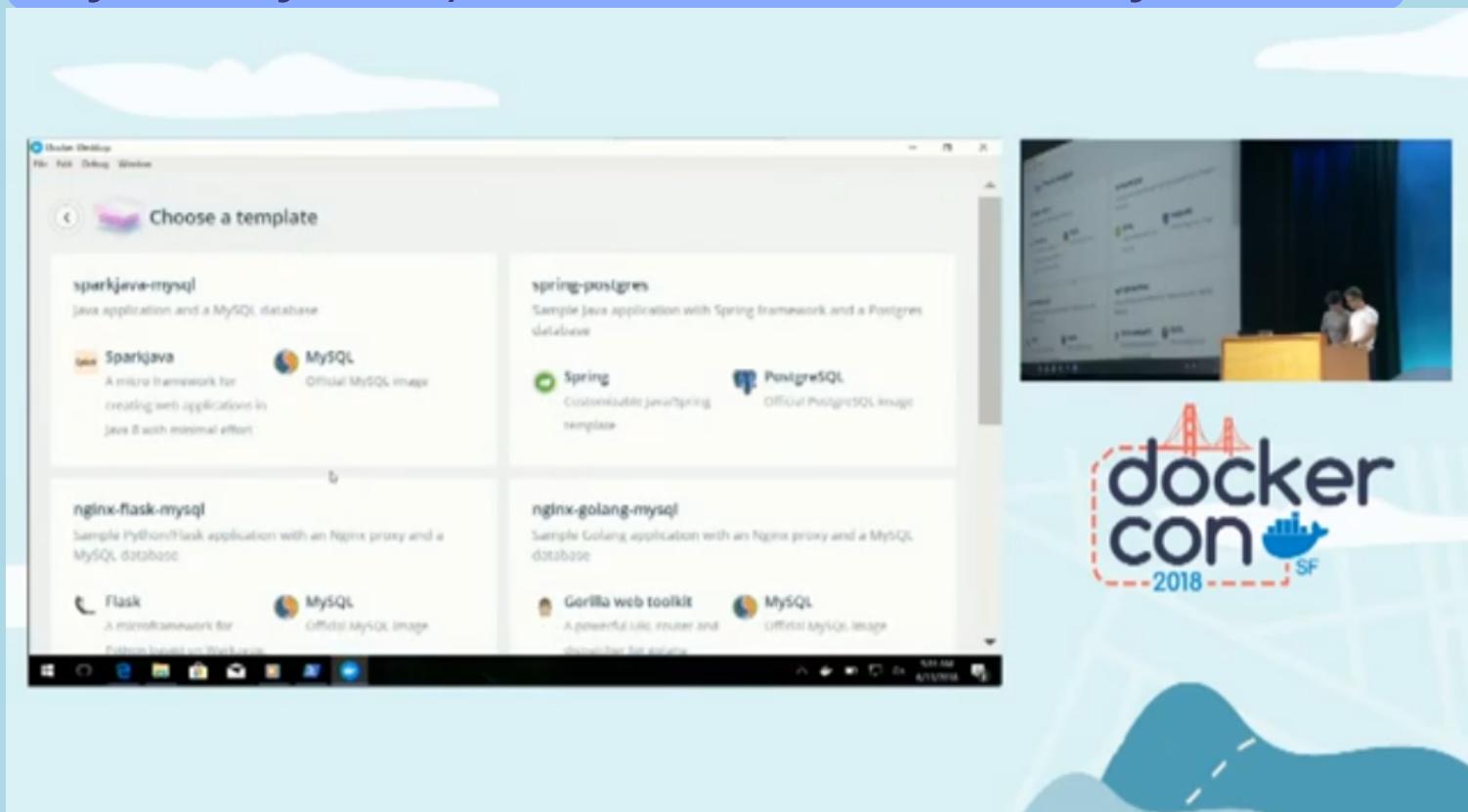
The image is a composite of two parts. On the left is a presentation slide titled "Docker Today: Containers are..." in yellow text, with "docker con 18" in the top right corner. The slide features four diamond icons representing different environments: "LINUX" (with a Linux logo), "WINDOWS" (with a Windows logo), "DATACENTER" (with a server rack icon), and "CLOUD" (with a cloud icon). A central circle contains a square icon with vertical lines. On the right is a video feed of a man in a dark suit and blue shirt speaking on stage. He is gesturing with his right hand. The background is red and blue. Below the video is the "docker con 2018 SF" logo, which includes a stylized bridge icon.

Day1: KeyNote/Breakouts, Community Theatre



SIGN UP FOR Docker Desktop BETA

Day1: KeyNote/Breakouts, Community Theatre

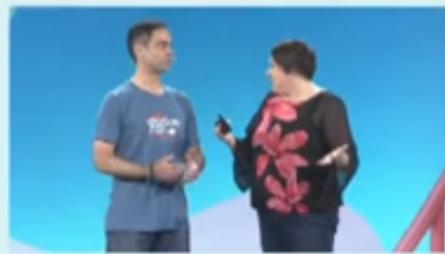
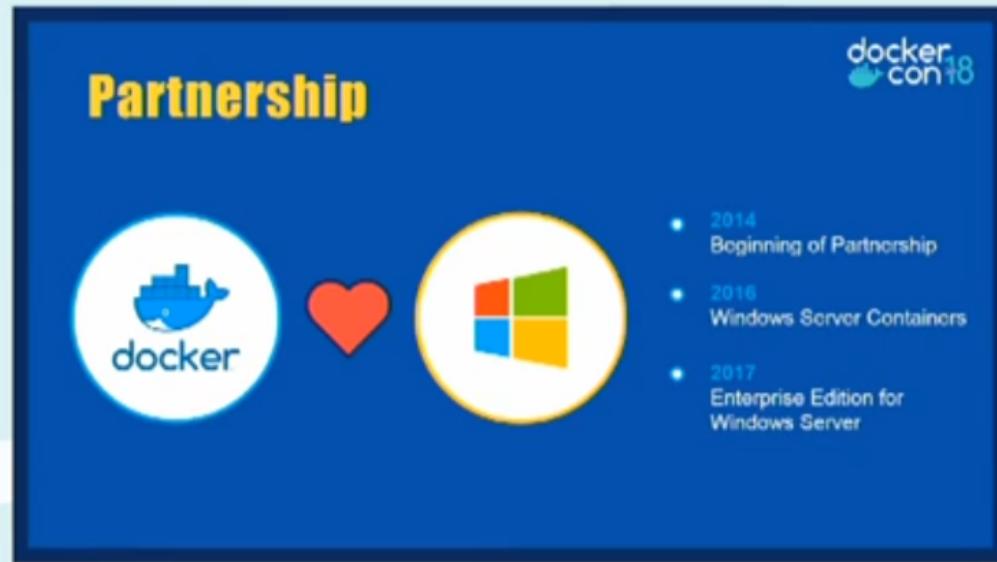


Day1: KeyNote/Breakouts, Community Theatre

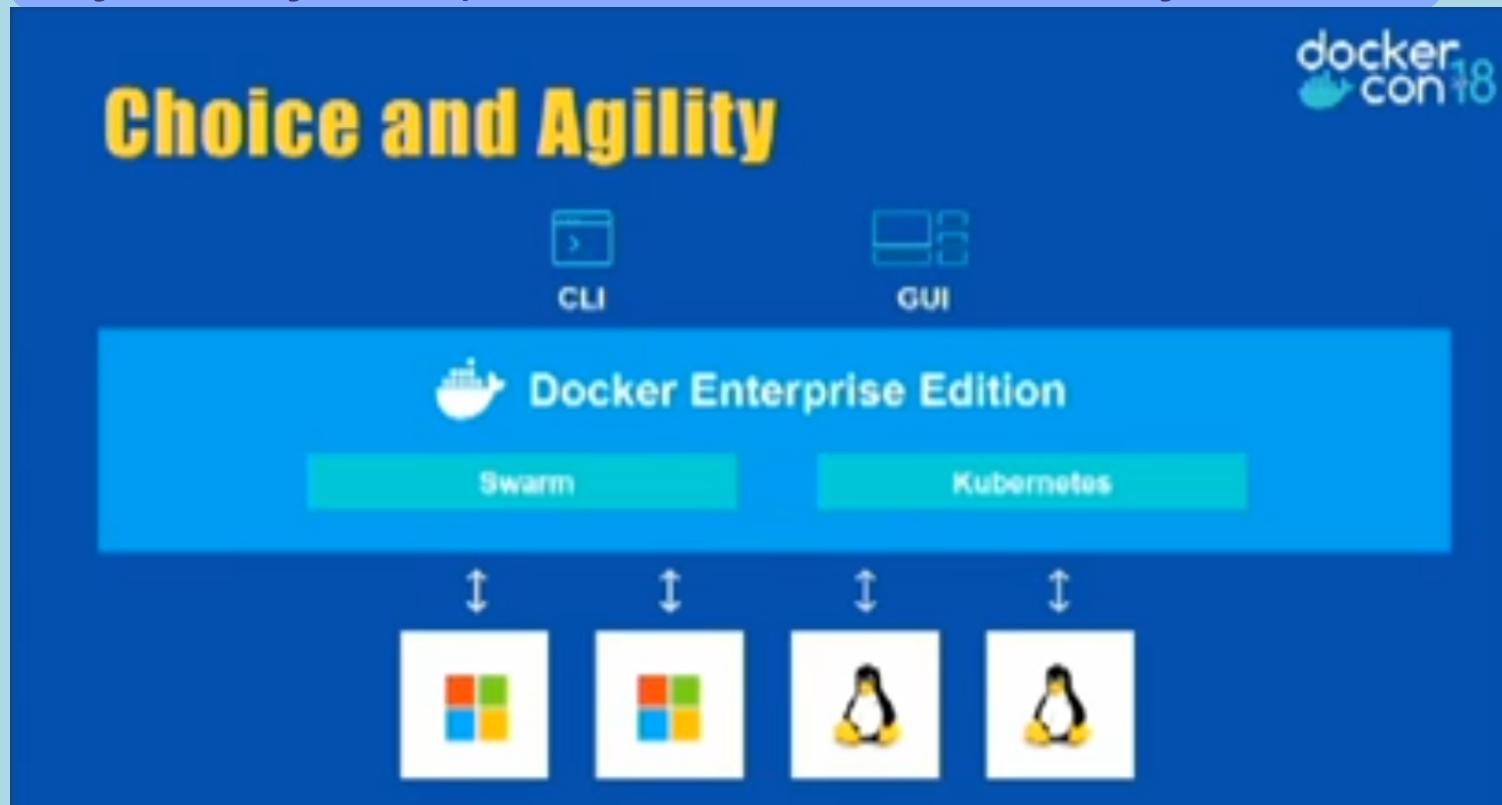
The Promise of Choice



Day1: KeyNote/Breakouts, Community Theatre



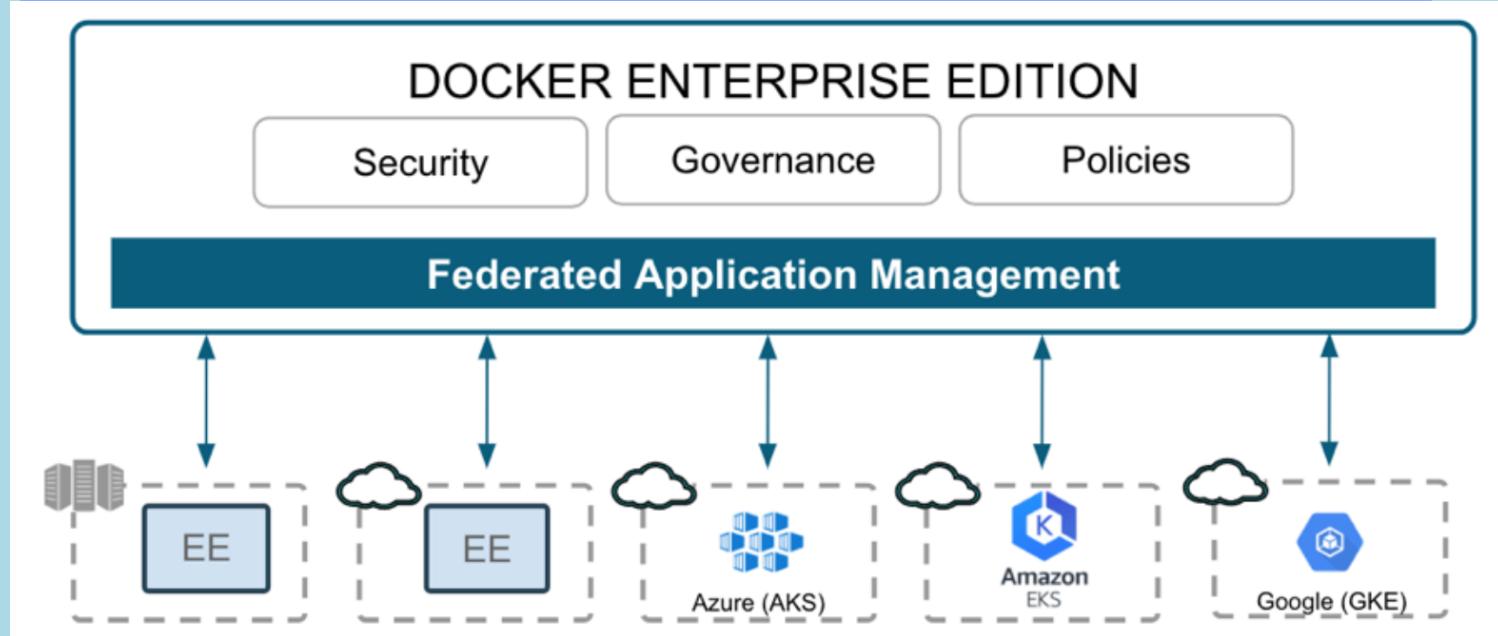
Day1: KeyNote/Breakouts, Community Theatre



SIGN UP FOR Docker Enterprise BETA

- Choice of app definition (k8s or compose yaml)
- Choice of Linux/Windows containers
- Choice of Swarm/Kubernetes orchestrator/cli
- Kubernetes on Docker EE/Windows Server

Day1: KeyNote/Breakouts, Community Theatre



SIGN UP FOR Docker Federation BETA

Demo : Docker EE

Moved on-premises staging cluster to production cloud

Replicated from East- to West-coast

Day1: Breakouts

Black Belt



Docker Platform Internals: T...



A Vision of Persistence



Istio: Managing, Securing, an...



Kubernetes Extensibility



Kubernetes with Docker



Container Orchestration fro...



Java in a World of Containers



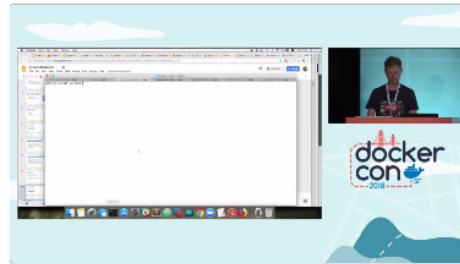
Windows Container Security

Day1: Breakouts

Contribute & Collaborate



Contributing 101



Docker Platform Internals SIG



Cloud Native Projects SIG Se...



Container Innovation SIG Ses...

Day1: Breakouts

Docker, Docker, Docker



Docker Storage: Designing a...



Networking in Docker Enterp...



Troubleshooting Tips from D...



Docker Enterprise Edition: A...



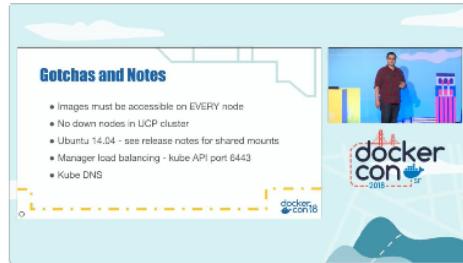
Docker for Developers on M...



How To Build Your Container...

Day1: Breakouts

Docker in Production



Docker on Docker: Leveragin...



Faster, Safer and 100% User-...



Disruption from Within- Inn...



How to Accelerate Docker Ad...



All Roads Lead to the Cloud:...

Day1: Breakouts

Innovation



Panel Discussion - Serverless



Accessible High Performance...



Docker and IoT: Controlling "...



Democratizing Machine Lear...



Docker, Microservices, and t...



Best Practices and Standards...



Packaging Software for the D...



Accelerating Development V...



Automated Hardware Testin...

Day1: Breakouts

Transform



A Strong Belief, Loosely Held...



Digital Transformation with...



The Complexity to "Yes" in A...



Shaving my Head Made me a...



5 Practices for Better, Cheap...



Diversity is Not Only About E...



Building a Docker Center of...



#bigwhale: An Unexpected J...

Day1: Breakouts

Using Docker



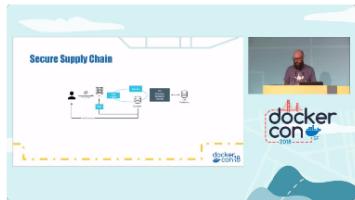
Demystifying Container Con...



Gordon's Secret Session: Ku...



Proactive Ops for Container...



Production SecOps with Kub...



Tips and Tricks of the Docker...



Don't have a Meltdown! Prac...



Message-Based Microservic...



5 Patterns for Success for Ap...



Building Your Production Tec...



Creating Effective Docker Im...

Day1: Party !!



Victor Coisne and 2 others liked



[Sam](#) @samuelkarp · Jun 13

#DockerCon conference party



7



39



Day2: KeyNote/Breakouts, Cool Hacks

1hr Keynote:



Day2: KeyNote/Breakouts, Cool Hacks

1hr Keynote:



- Liberty Mutual

Day2: Cool Hacks

Cool Hack 1 - NASA/John Hopkins Applied Physics Lab - DART

Christopher Heistand presented how they use Docker to perform hardware testing for the DART Satellite mission. DART is an attempt to *"Save the World"* by shooting down asteroids before they can hit earth.



Step 3: Save the World (by validating the kinetic impact technique)



Goddard Space Flight Center
Johnson Space Center
Langley Research Center
Glen Research Center
Marshall Space Flight Center
Planetary Defense Coordination Office



JOHNS HOPKINS
APPLIED PHYSICS LABORATORY



UNIVERSITY OF MARYLAND



Jet Propulsion Laboratory
California Institute of Technology



LAWRENCE LIVERMORE
NATIONAL LABORATORY



University of Colorado
Boulder



AEROJET
ROCKETDYNE

Day2: Cool Hacks

Cool Hack 2 - Google - Machine Learning with KubeFlow



Day2: Cool Hacks

Cool Hack 3 - Idit Levine, Solo.io - Gloo

The diagram illustrates the challenge of transitioning between different architectural styles. It shows three main stages: Monolithic Apps, Microservices, and Serverless. Each stage is represented by a blue box containing a puzzle piece icon. Below each stage are specific tools or frameworks:

- Monolithic Apps:** Ansible
- Microservices:** Docker EE
- Serverless:** AWS Lambda

Below these, there are additional tool icons grouped under each stage:

- Monolithic Apps:** APM, SOA, Spark
- Microservices:** Prometheus, microservices, Open Tracing
- Serverless:** CloudWatch, Event-driven, X-RAY

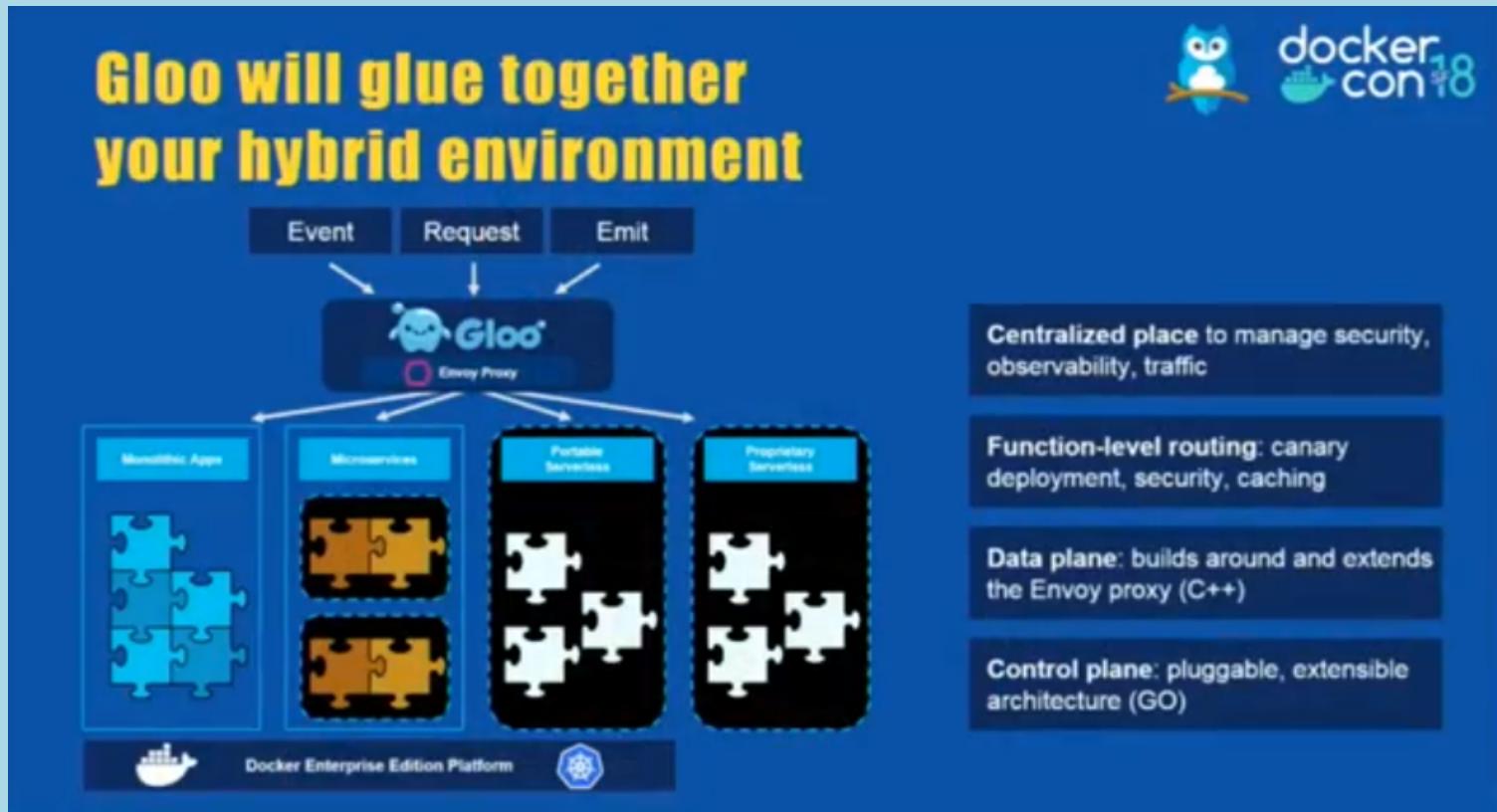
THE PROBLEM:
Disparate ecosystems, hard transition

Enterprise faces 4 main problems in adopting innovative architectures:

1. Insolation between brown and green field
2. Transition is lengthy and diverts essential personnel from core mission
3. Duplicate redundant tools
4. Requires silo teams

Day2: Cool Hacks

Cool Hack 3 - Idit Levine, Solo.io - Gloo



The Top 5 Announcements

Docker debuts federated application management across hybrid/multi-cloud infrastructure

1

Kubernetes Support for Windows Server containers under Docker EE

2

Template-based workflows for Docker Desktop to extend containerization to a broader range of enterprise developers

3

Making Compose Easier with to use with the Application Packages

4

5

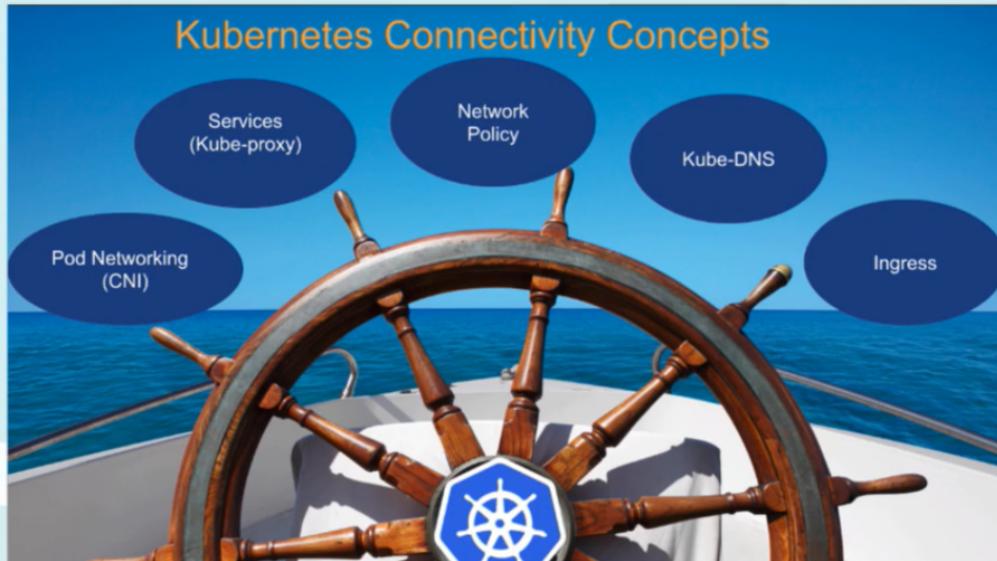
Docker, Inc identified 9 different Serverless frameworks for Docker EE, out of which 6 of them are already confirmed - OpenFaaS, nuclio, Gestalt, Riff, Fn and OpenWhisk

o

src:

<http://en.community.dell.com/techcenter/b/techcenter/archive/2018/06/26/top-5-most-exciting-dockercon-2018-announcements>

Day3: Rerun of best presentations



"Demystifying Container Connectivity with Kubernetes in Docker"

Nicola Kabar & Karthik Prabhakar

Day3: Rerun of best presentations

The diagram illustrates a Local Technology Stack. It features a central column of five services: Redis (Data Protection Caching), ELK (Logging), Kafka (Messaging), and PG Admin (Data). To the left, a large red box labeled "Containers" contains "Web Apps" and "Web APIs". Below this, a stack of three white boxes is labeled "Source". A dashed yellow arrow points from the "Source" stack to the central services, with the text "docker-compose up" written above it. The Docker logo and "docker.com 18" are visible at the bottom right of the stack. To the right of the diagram, a video frame shows Michele Leroux Bustamante speaking at a podium. Behind her is a blue background with the Docker logo and the text "docker.com". Below the video is the DockerCon 2018 San Francisco logo, which includes the Golden Gate Bridge and the text "dockercon SF 2018".

"Message-Based Microservices Architectures Driven with Docker "

Michele Leroux Bustamante

Day3: Rerun of best presentations

Persistence Implementations

- Per container storage
- Shared storage (same host)
- Multi-Host shared storage

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"Docker Storage: Designing a Platform for Persistent Data"

Dan Finneran

Day3: Rerun of best presentations

How does it work?

4. Deploy Citadel to assign identities and enable secure communication

The diagram illustrates the Istio architecture for securing microservices. It shows two services, A and B, each with an Envoy proxy on top. Below them are the Pilot and Mixer components, which interact with a central Citadel component. Arrows labeled "certs" point from Citadel to the Envoy proxies in both services, indicating that Citadel assigns identities and provides certificates to enable secure communication between the services.

docker con 2018 SF

"Istio: Managing, Securing, and Observing Microservices"

Lin Sun & Zack Butcher

Day3: Rerun of best presentations

Tricks of the Captains

- A hodgepodge of tricks from members of the Docker Captains Programme
- And other luminaries of microservices and containers



"Tips and Tricks of the Docker Captains"

Adrian Mouat

DockerCon Europe 2018

DockerCon Europe 2018

DockerCon Europe 2018 Schedule



Resources

| | |
|---|---|
| The Docker Blog (of course!) | https://blog.docker.com/ |
| DockerCon Keynote/Cool Hack Videos | https://www.youtube.com/watch? v=RnWXOAplvjY&list=PLkA60AVN3hh96Ef6GljWoGpXPG23rN7 |
| DockerCon Breakout Session Videos | https://dockercon2018.hubs.vidyard.com/ |
| Top 5 Most Exciting Dockercon 2018 Announcements | http://en.community.dell.com/techcenter/b/techcenter/archive/2018/05-most-exciting-dockercon-2018-announcements |
| A Look Back at DockerCon San Francisco | http://56k.cloud/blog/a-look-back-at-dockercon-san-francisco/ |

Merci ! - Questions ?



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