Docker as a hosting target

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About me

Roberto Messora

Specialist @ **Value Lab Spa**

- GIS / Geospatial expert
- Sofwtare engineer
- Cloud architect

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Github

https://github.com/robymes/ugidotnet15

Slideshare

http://www.slideshare.net/RobertoMessora/docker-as-a-hosting-target

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Agenda

- “It works on my machine”
- Consolidare il deploy: Virtual vs Container
- Docker Container e dintorni
- Scalare Docker: Docker Swarm (et al.)
- Docker Swarm “in da” cloud: Azure & AWS
- Q&A

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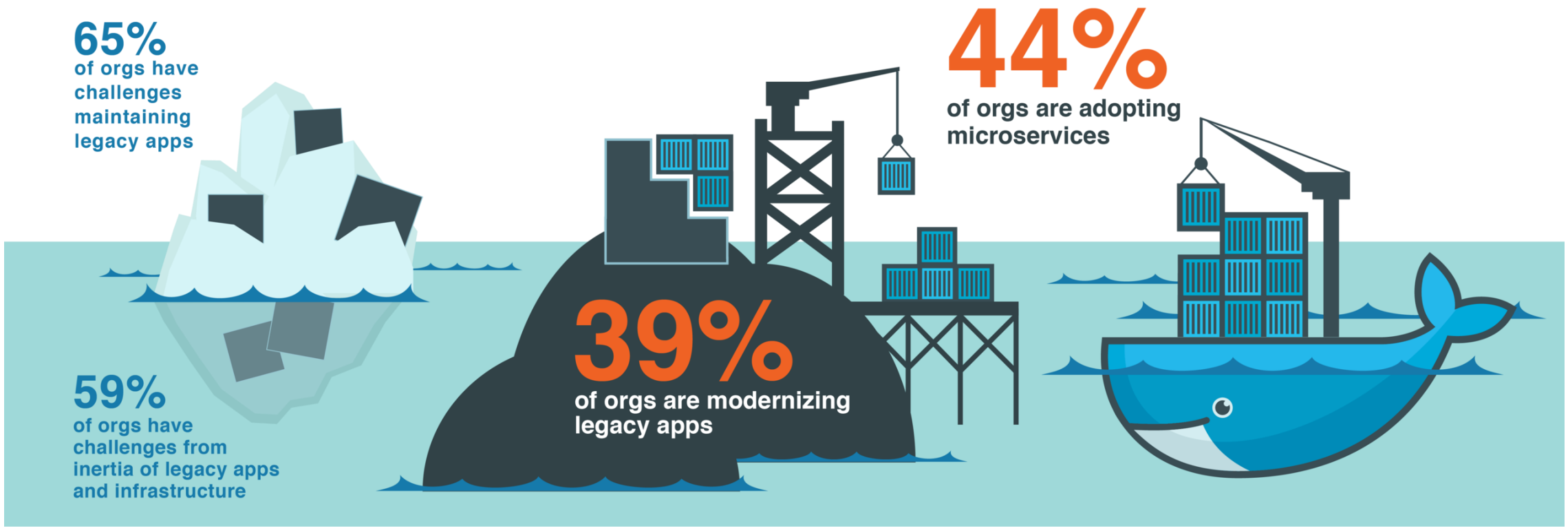
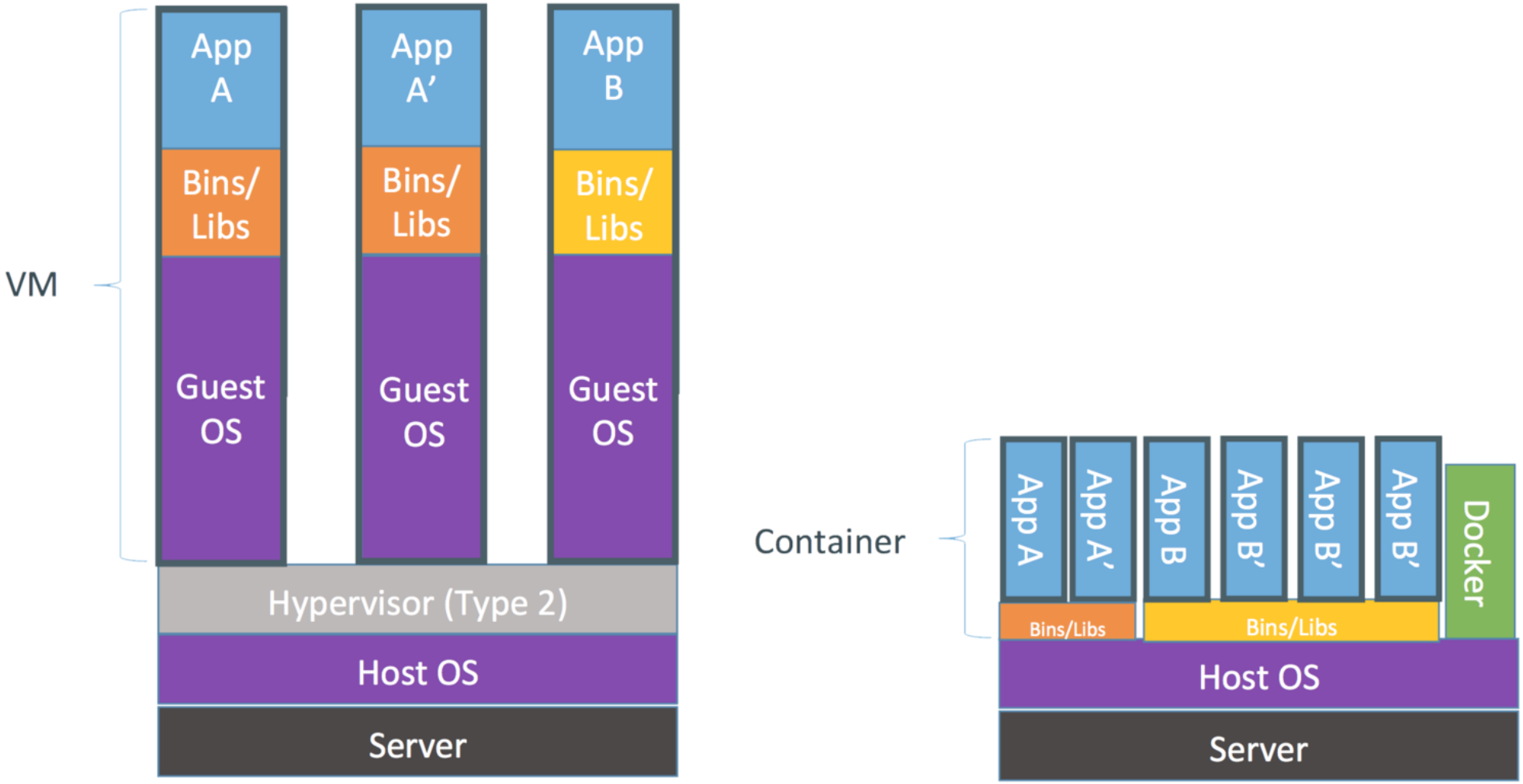
Docker Survey 2016

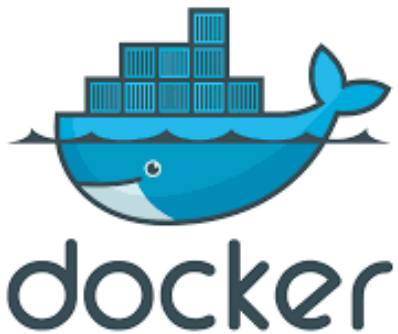


Consolidare il deploy: Virtual vs Container



Cos’è un Container

“Docker containers wrap a piece of software in a complete filesystem that contains everything needed to run: code, runtime, system tools, system libraries – anything that can be installed on a server. This guarantees that the software will always run the same, regardless of its environment.”



https://www.docker.com/what-docker

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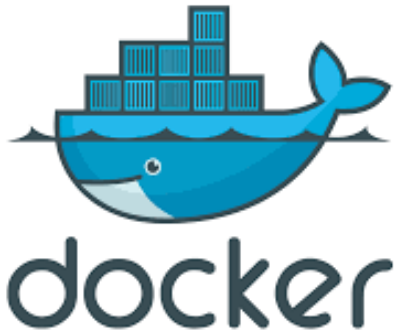
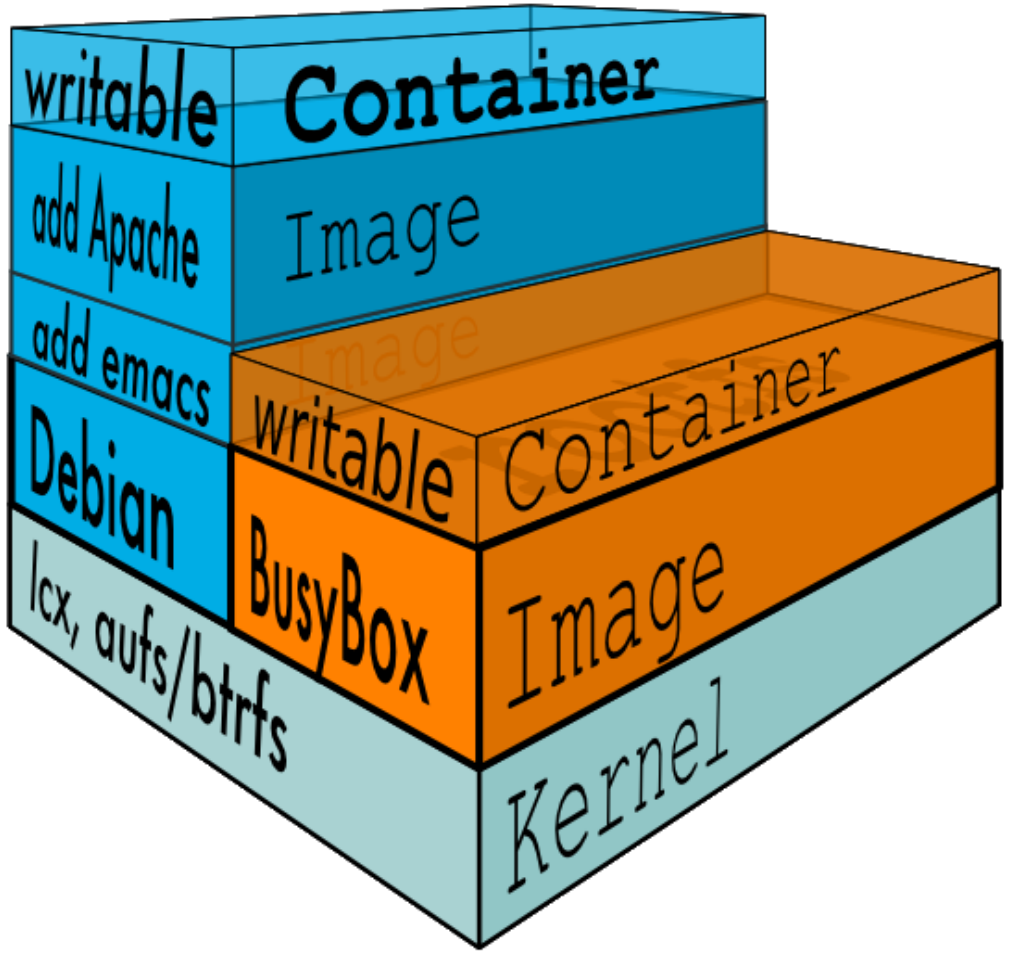


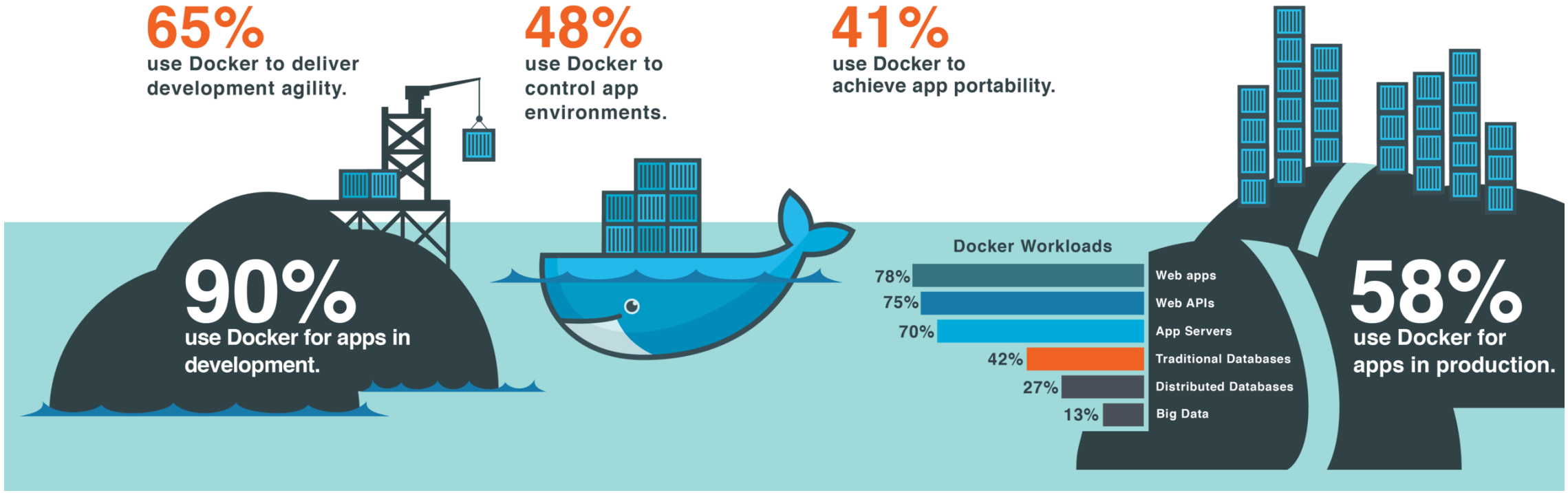
1 - demo

Docker Container: un semplice servizio REST basato su Node.JS

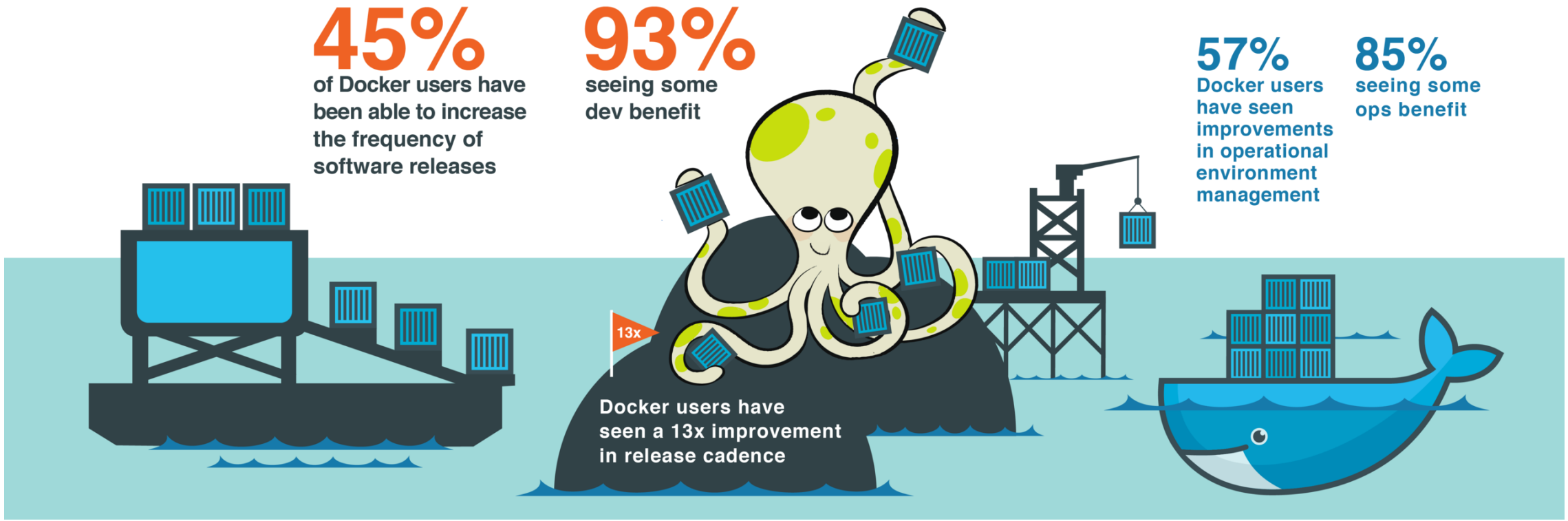
Docker Container: uno stack di immagini



Docker Survey 2016

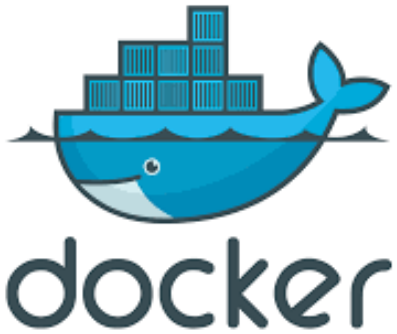


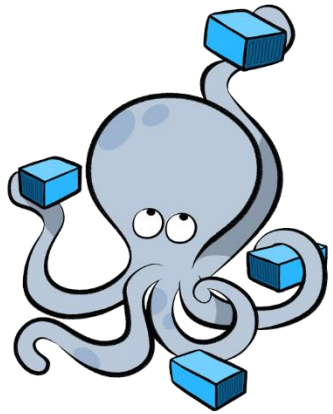
Docker Survey 2016

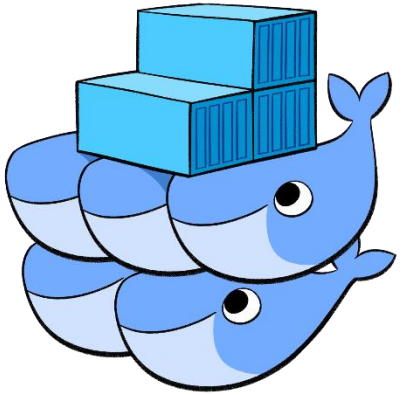


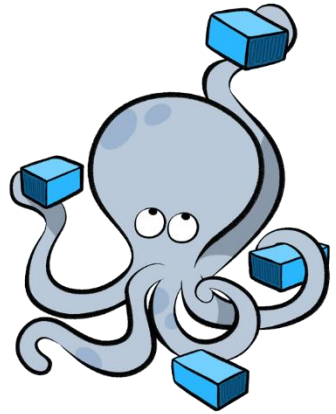
Docker Container e dintorni

- L’ecosistema Docker è composto da una serie di elementi
  - Docker Container
  - Docker Compose
  - Docker Machine
  - Docker Swarm
  - Docker Hub







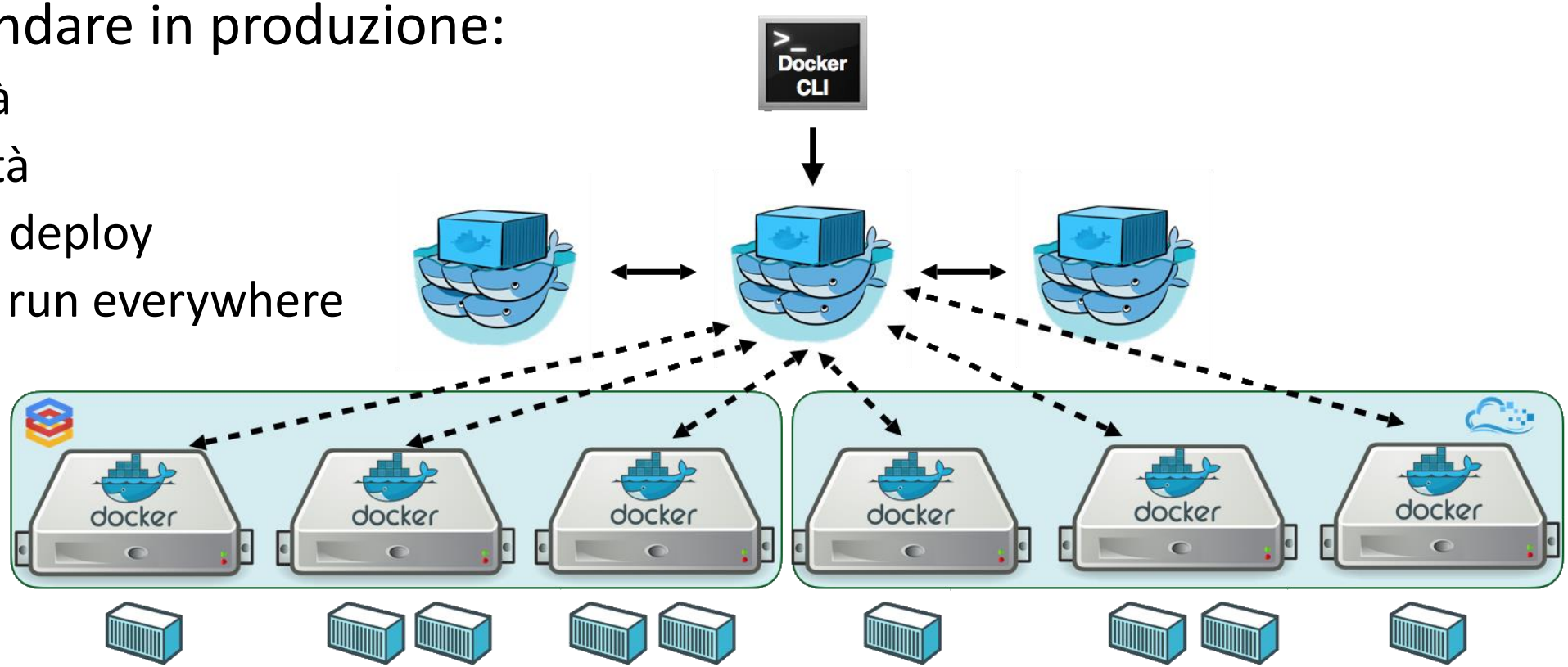


2 - demo

Docker Compose: proxy/load balancer + servizio REST Node.JS + MongoDB

Scalare Docker: Docker Swarm

- Tempo di andare in produzione:
  - Scalabilità
  - Affidabilità
  - Facilità di deploy
  - Dev once run everywhere



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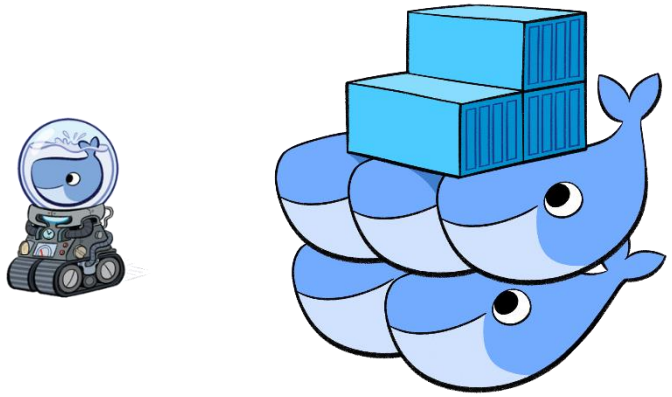

3 - demo

Docker Swarm: Azure & AWS

Scalare container: non solo Docker Swarm

- Apache Mesos
- Marathon
- Mesosphere DC/OS
- Kubernetes
- …

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Reference

- https://github.com/jwilder/nginx-proxy
- https://github.com/rafabene/devops-demo
- https://youtu.be/JgUyI-MIKZ0

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Thank you! Questions?

https://twitter.com/ugidotnet

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