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WHY CONTAINERS ?

IThinkpark, 20.10.2017

Dr. Roland Huß, Red Hat, @ro14nd

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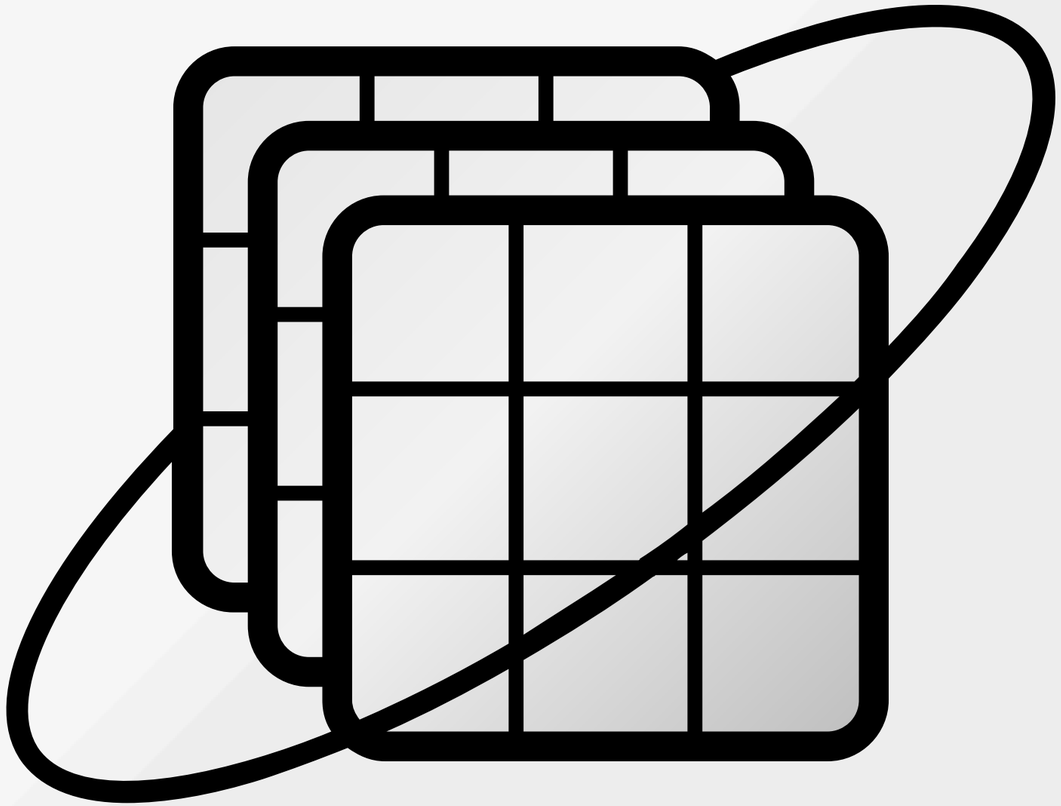

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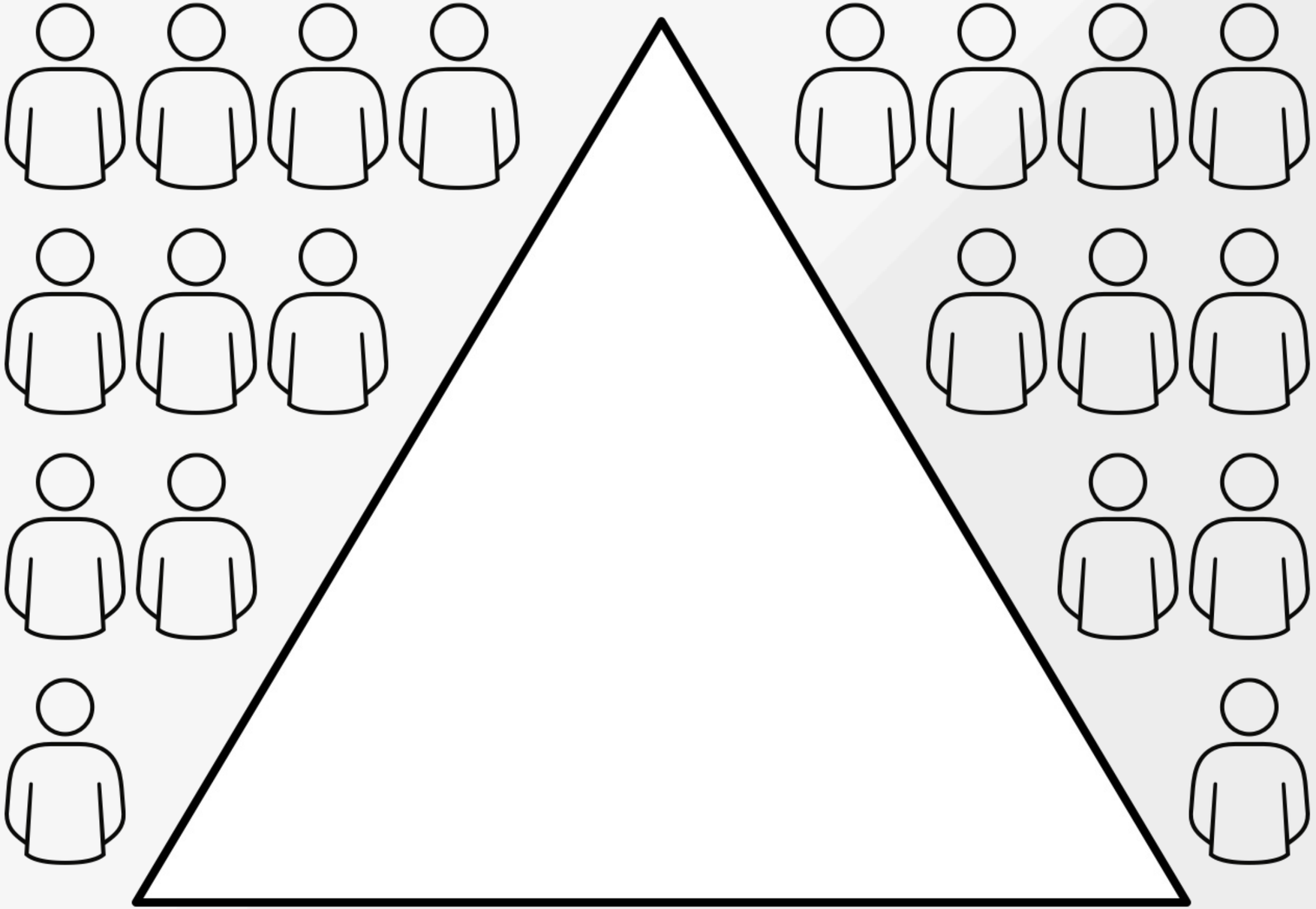

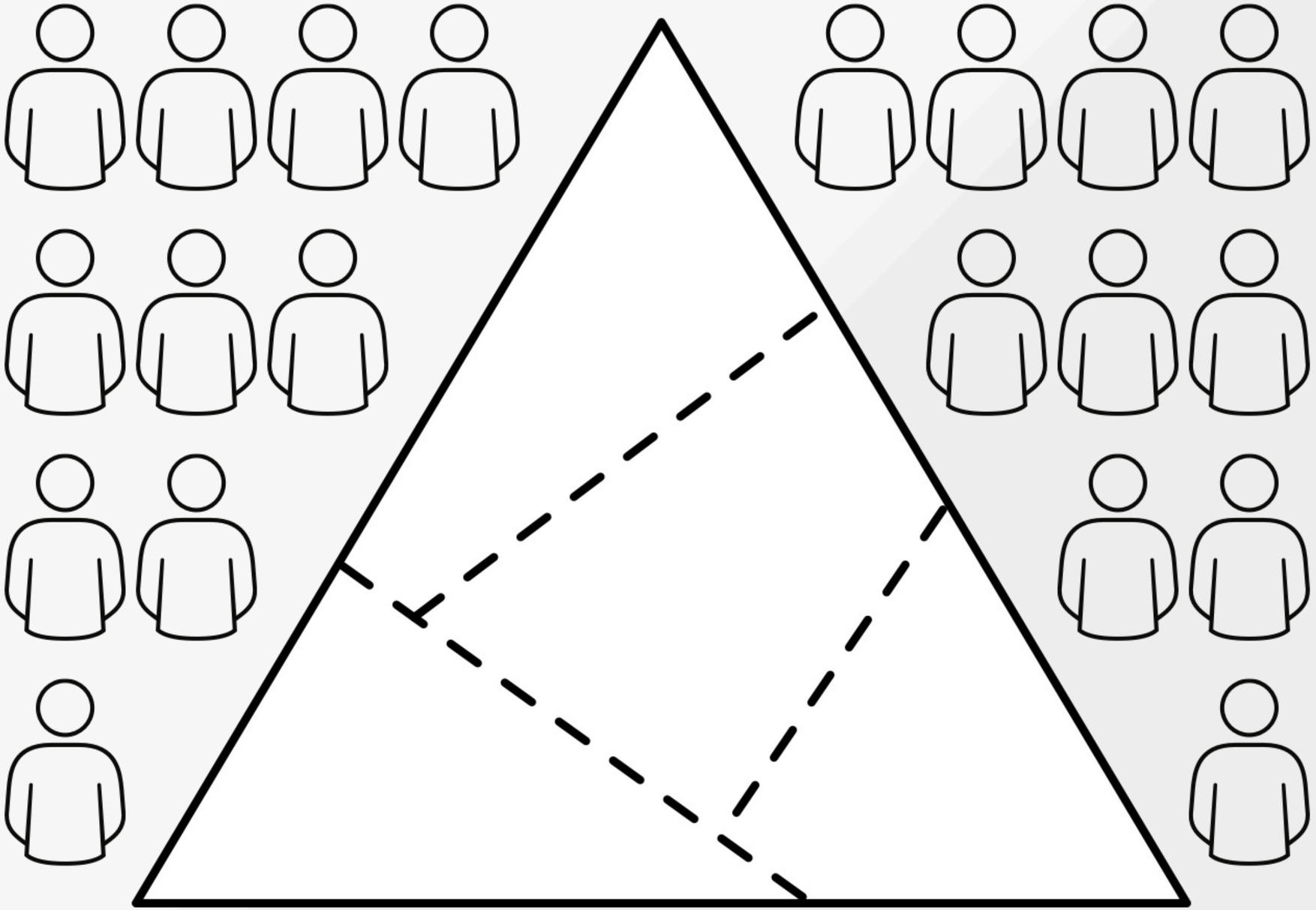

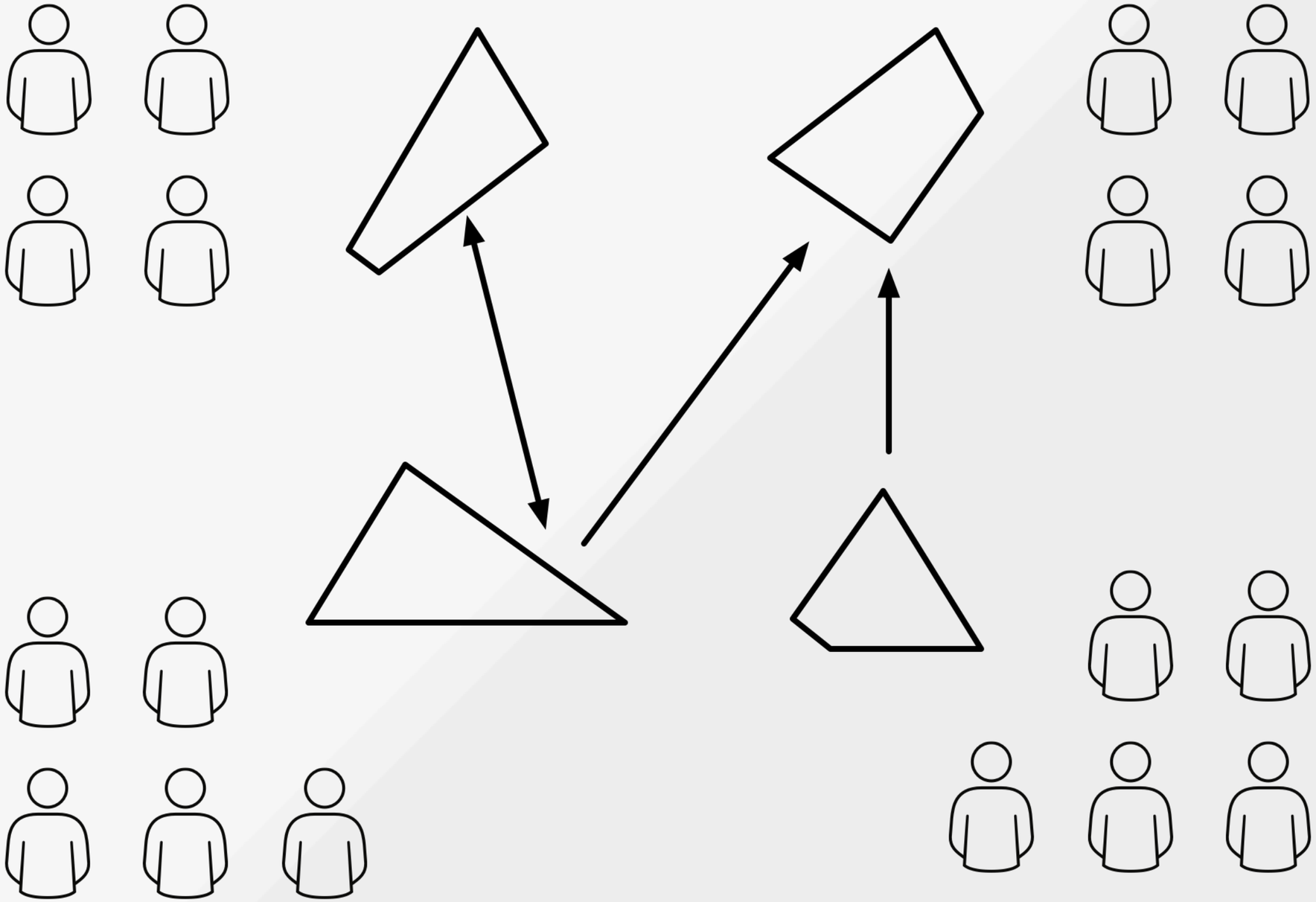

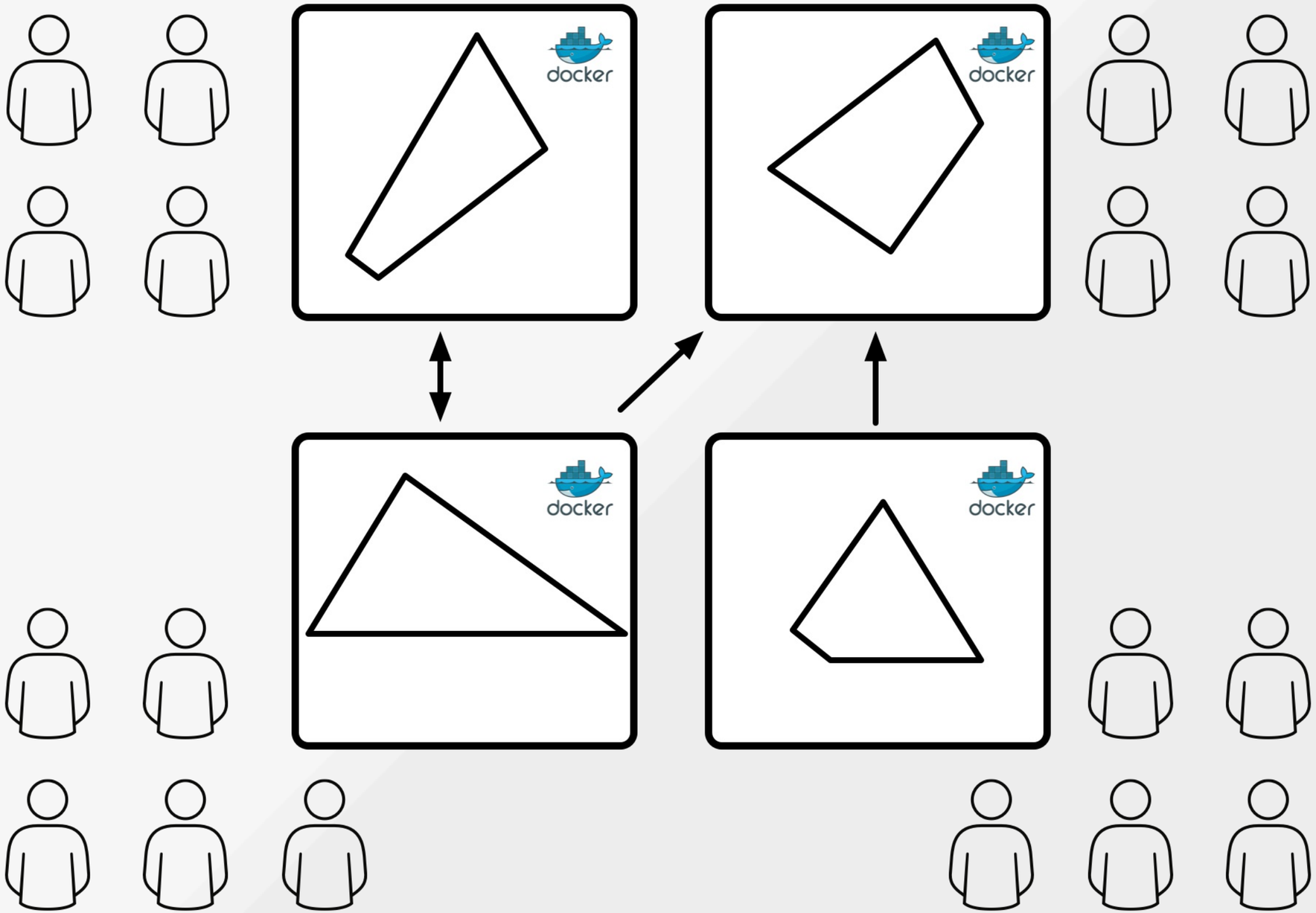

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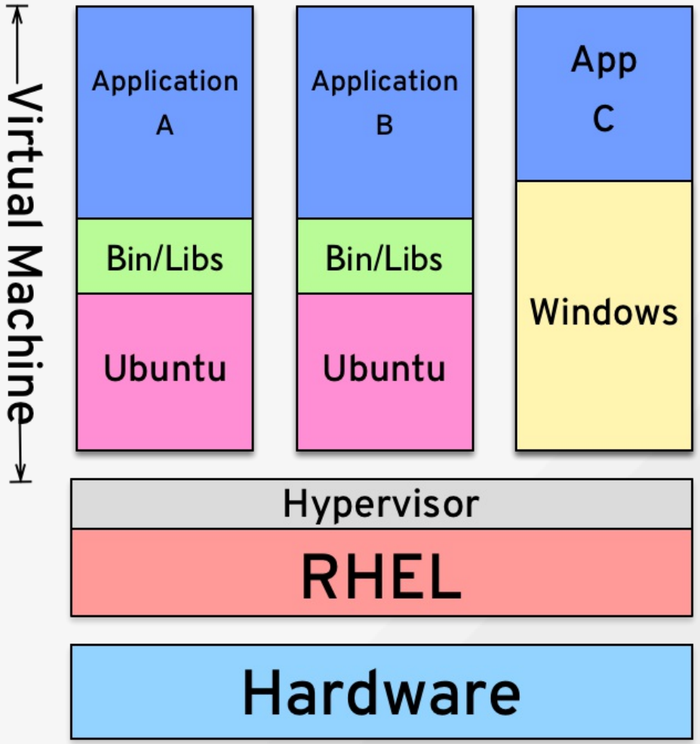
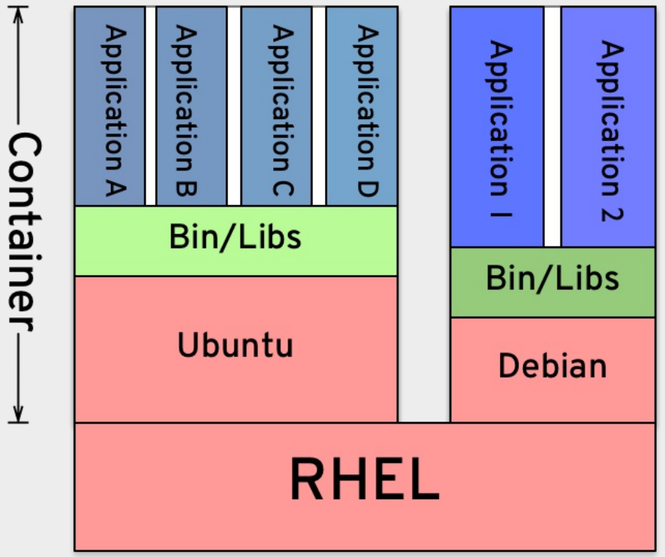
VM VS. CONTAINER

Containers are **isolated**, but share the kernel and (some) files

➔ **lighter** and **faster**





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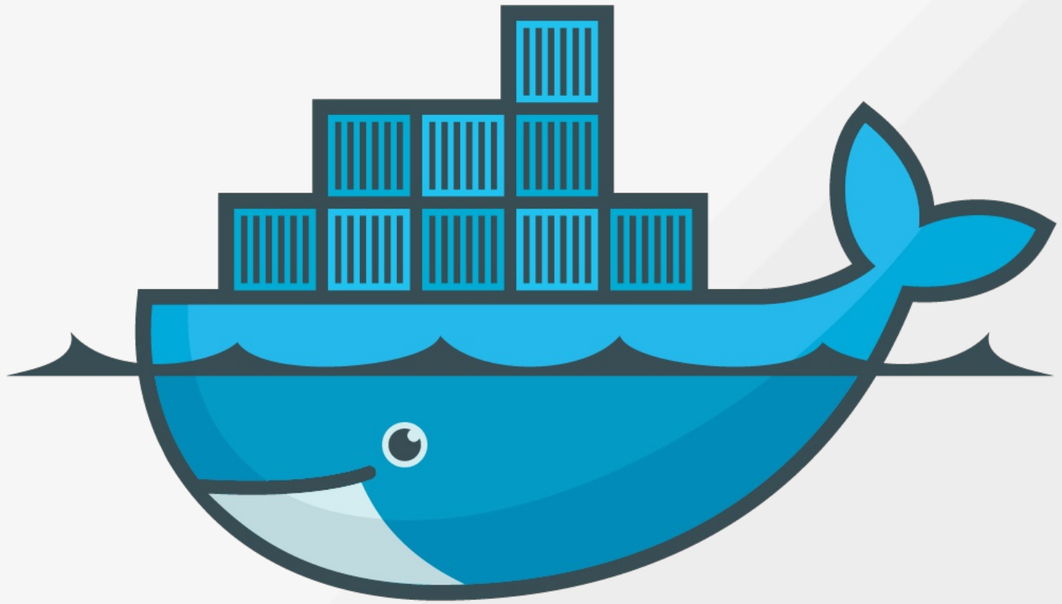

docker

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DOCKER

- Open-Source project backed by Docker Inc. (since 2013)
- Tools for managing containers
- Image format definition
- Sharing via registries
- On top:
  - Docker Compose
  - Docker Swarm

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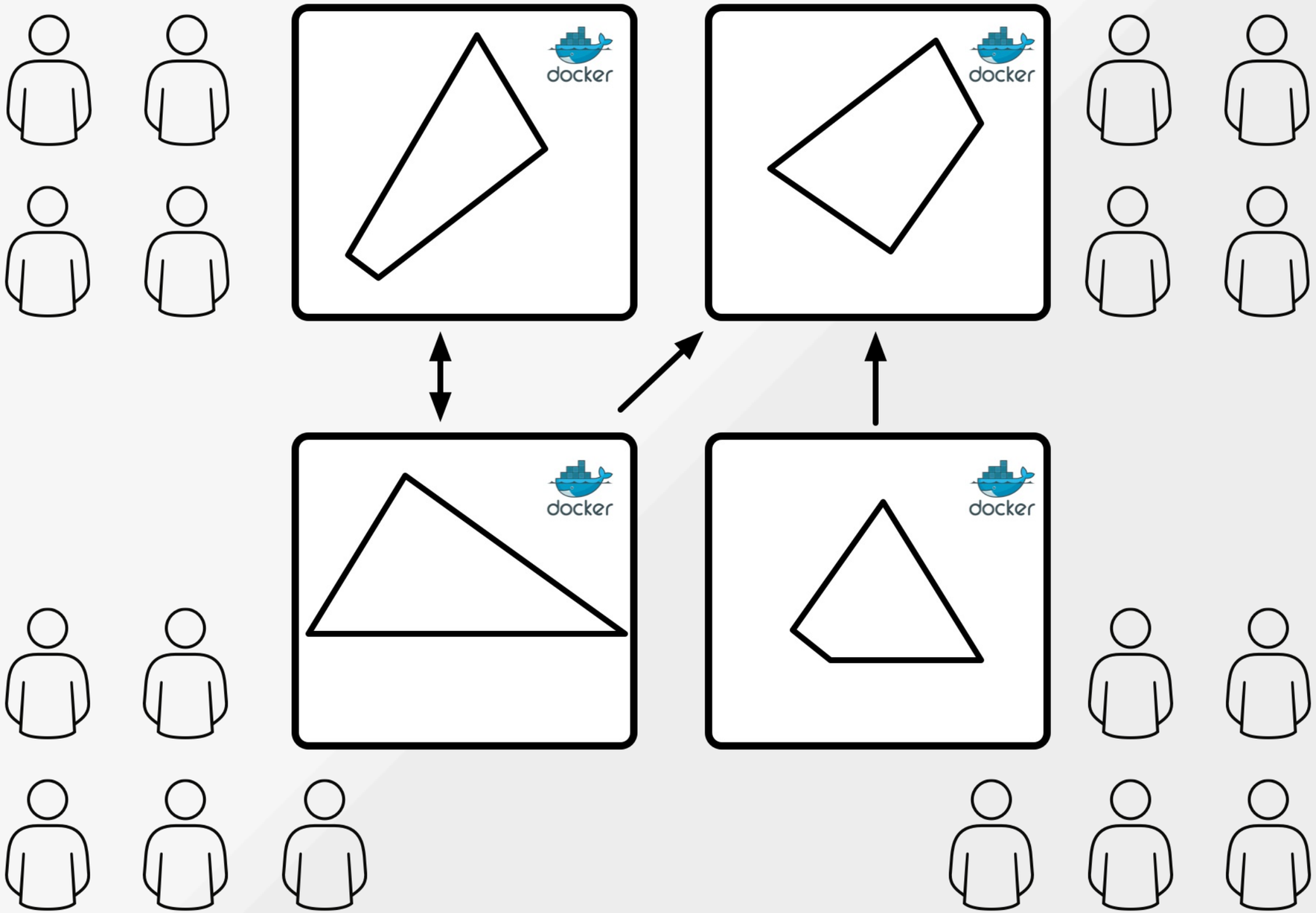

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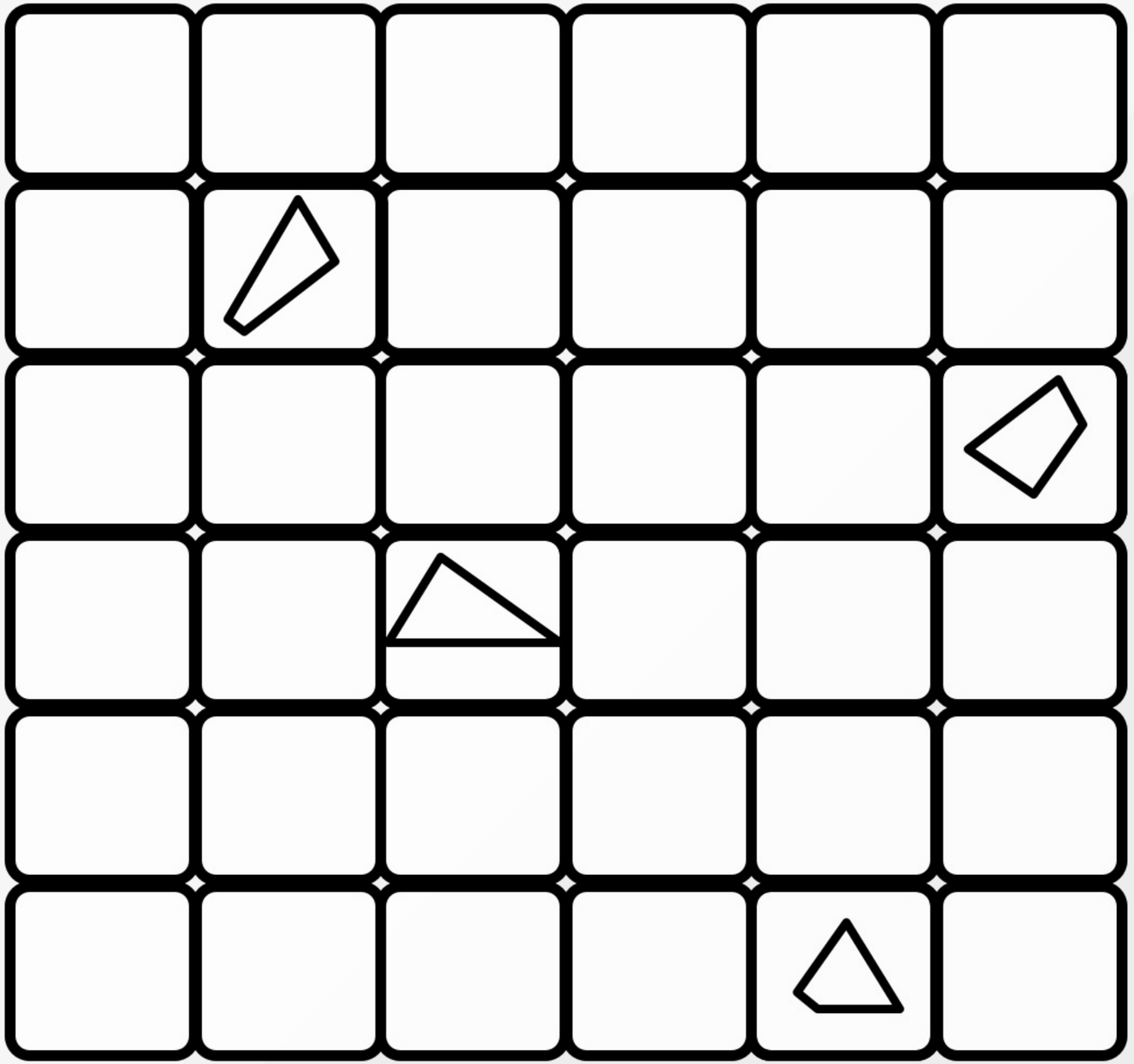

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KUBERNETES

- Open Source orchestration system for containers
- Started by Google in 2014
- Features:
  - Scheduling
  - Horizontal scaling
  - Self-healing
  - Service discovery
  - Automated rollout and rollbacks

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OPENSHIFT

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OPENSHIFT

- Adds the **BUILD** to Kubernetes
- Developer and Operation Tools
- Infrastructure Services
  - Registry, Router, OAuth2 Security
- Volume Management
- Multi tenancy
- Management UI

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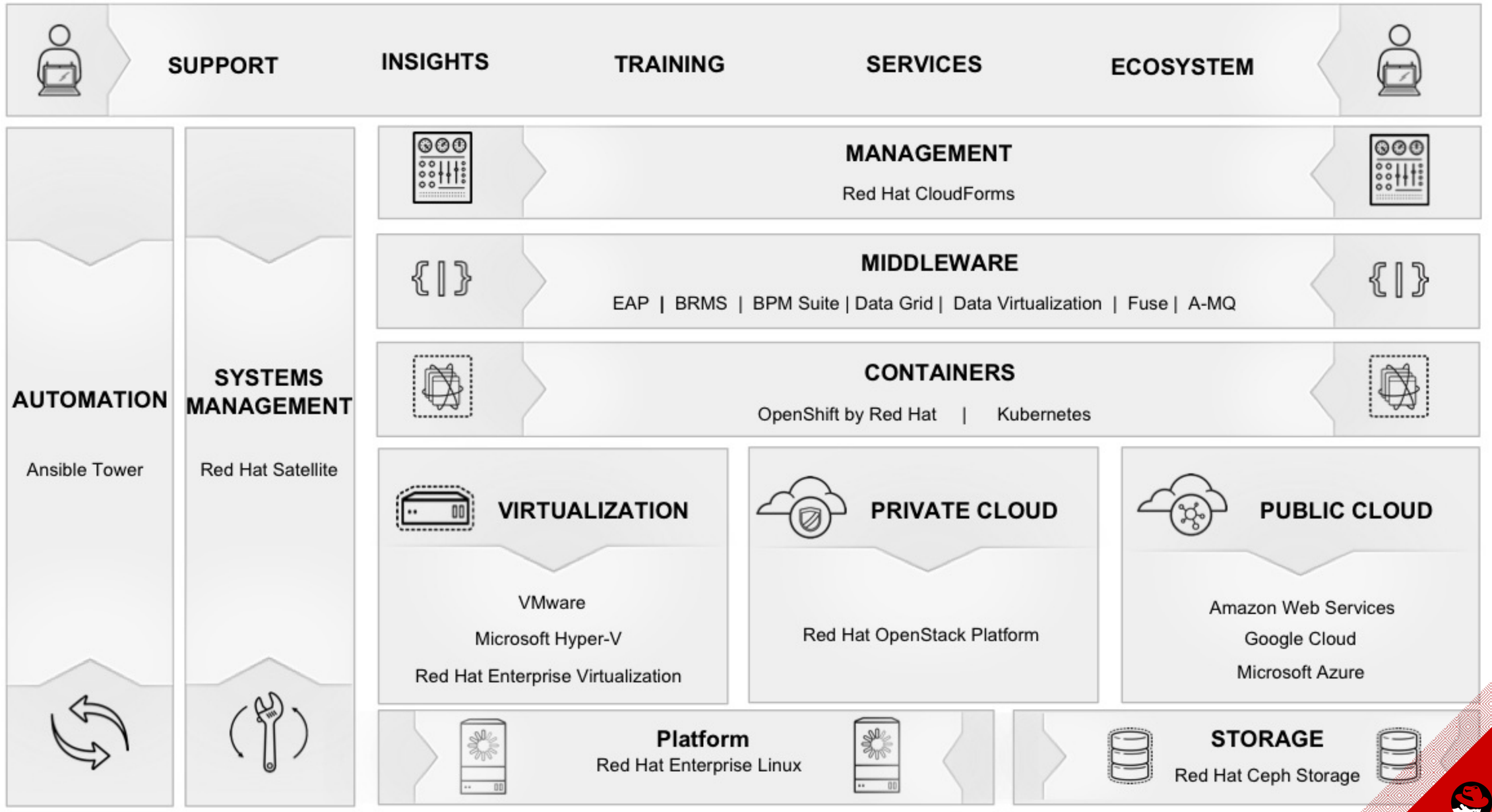
SUPPORT
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Red Hat Satellite
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Red Hat CloudForms
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Microsoft Hyper-V
Red Hat Enterprise Virtualization
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Red Hat OpenStack Platform
PUBLIC CLOUD
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Google Cloud
Microsoft Azure
Platform
Red Hat Enterprise Linux
STORAGE
Red Hat Ceph Storage

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ARBEITSINSEL

Wie kann ich Java Anwendungen containerisieren ?

Twitter	@ro14nd
Docker Maven Plugin	https://dmp.fabric8.io

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