Turning Containers into Cattle

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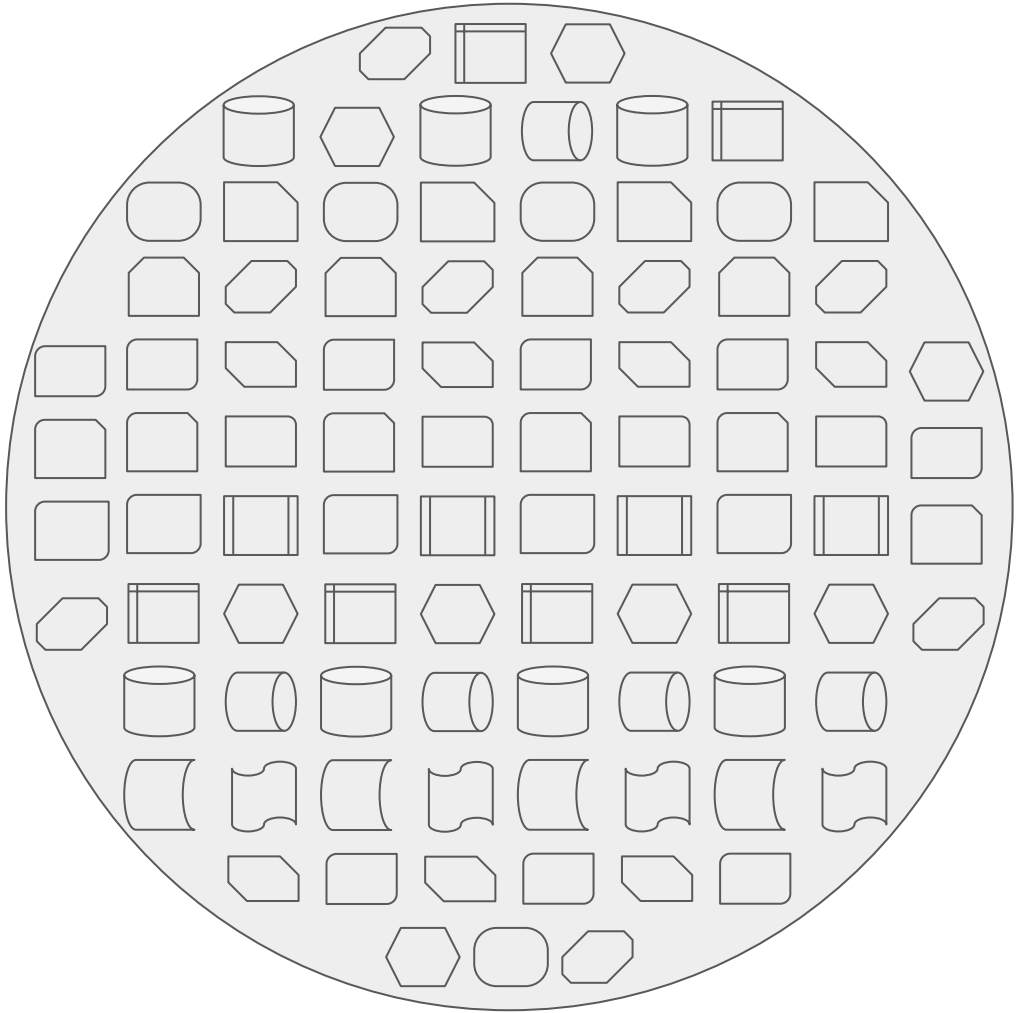
Container World Feb 2016

null hypothesis

Containers don’t matter

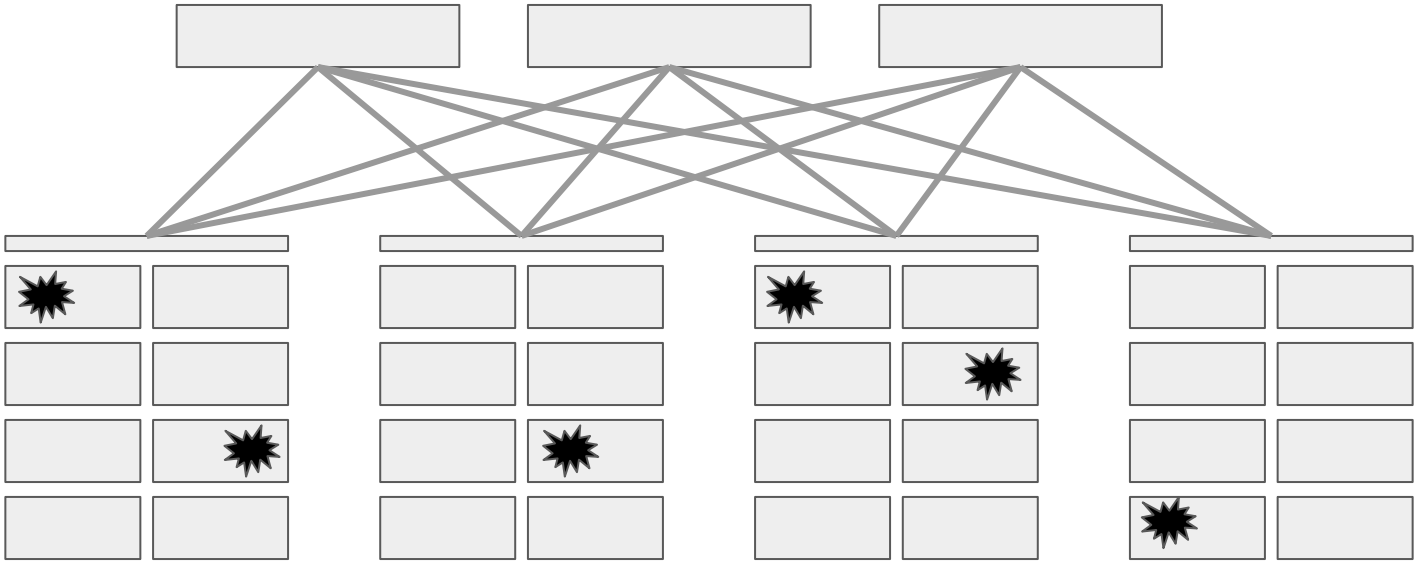
Schedulers don’t matter

Cluster managers don’t matter



Heterogeneity is the norm

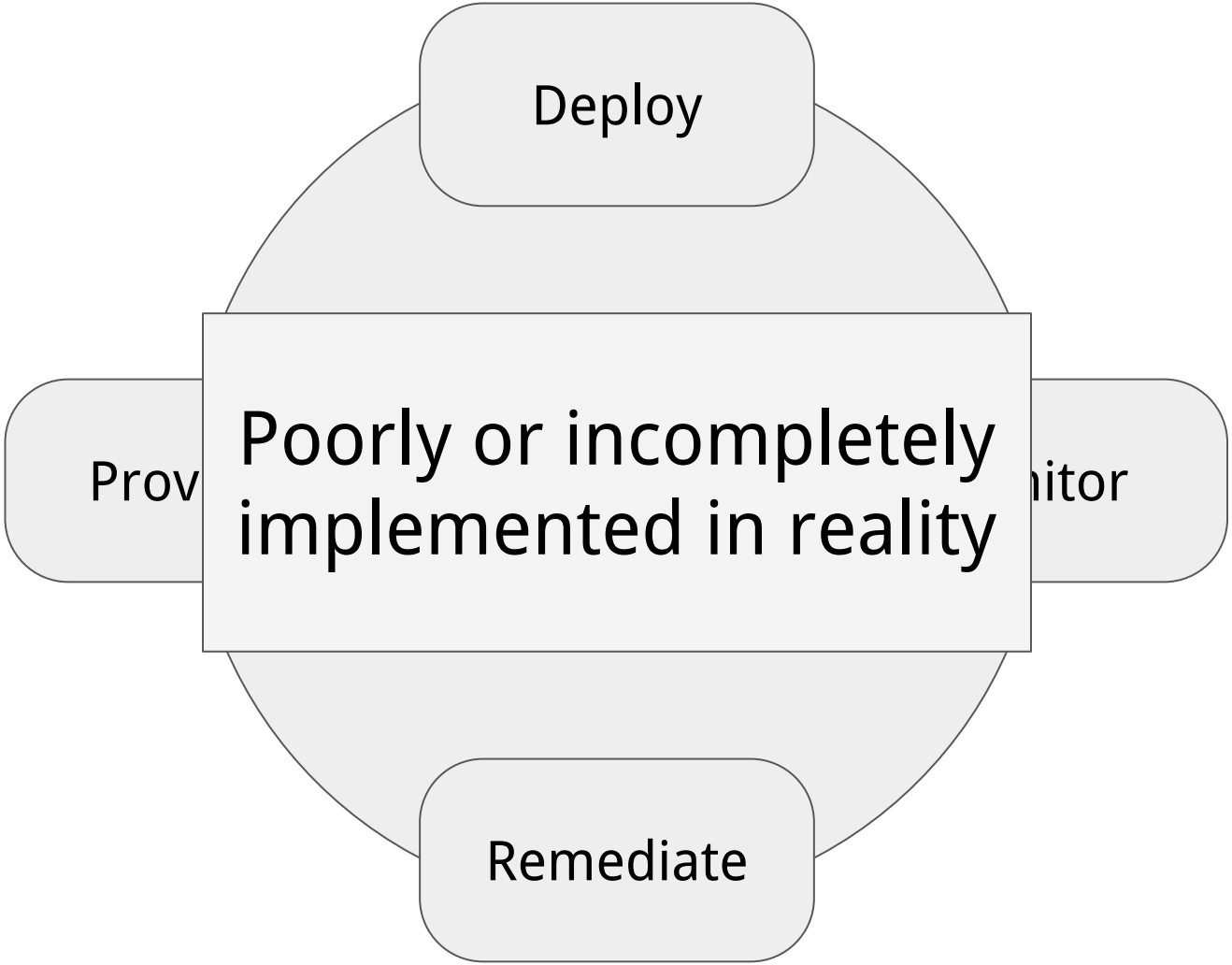
Operational overhead

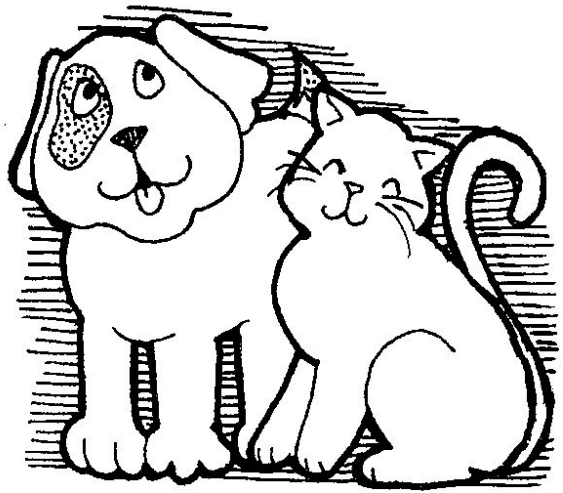


Change ⟶ fragility

Mortal boxes

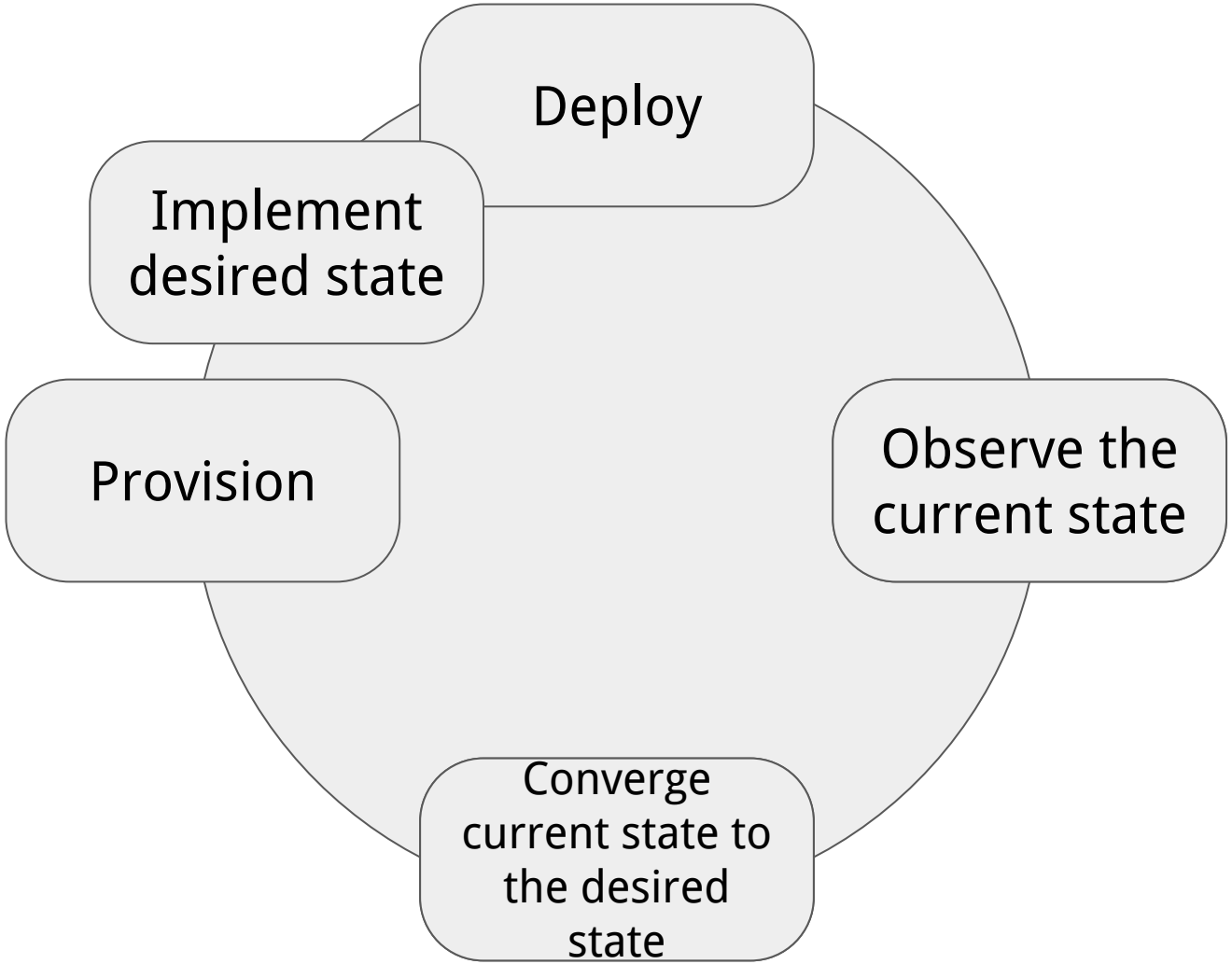
Ephemeral touch points

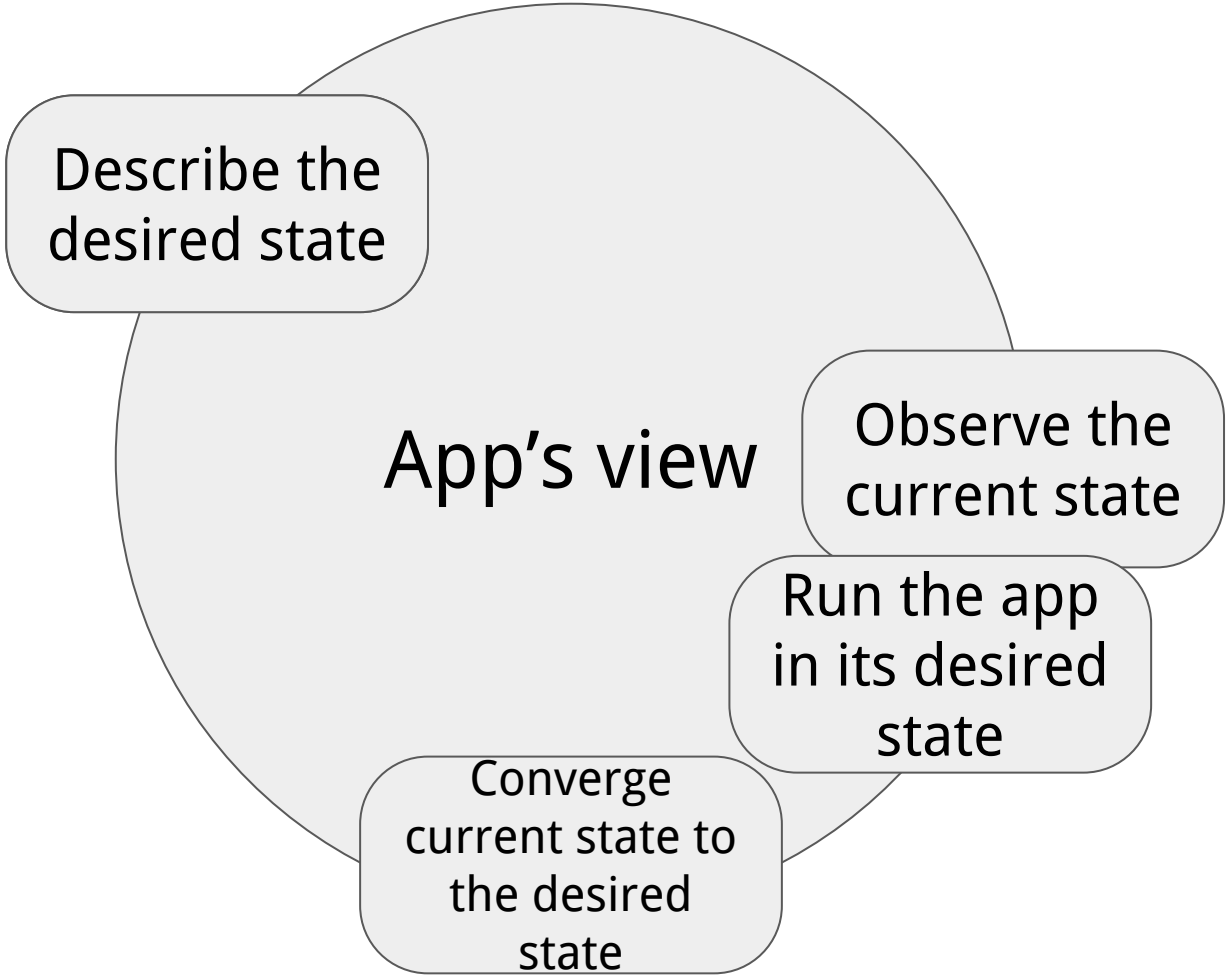

Deploy
Prov
Poorly or incompletely implemented in reality
itor
Remediate



That’s how pets are born!

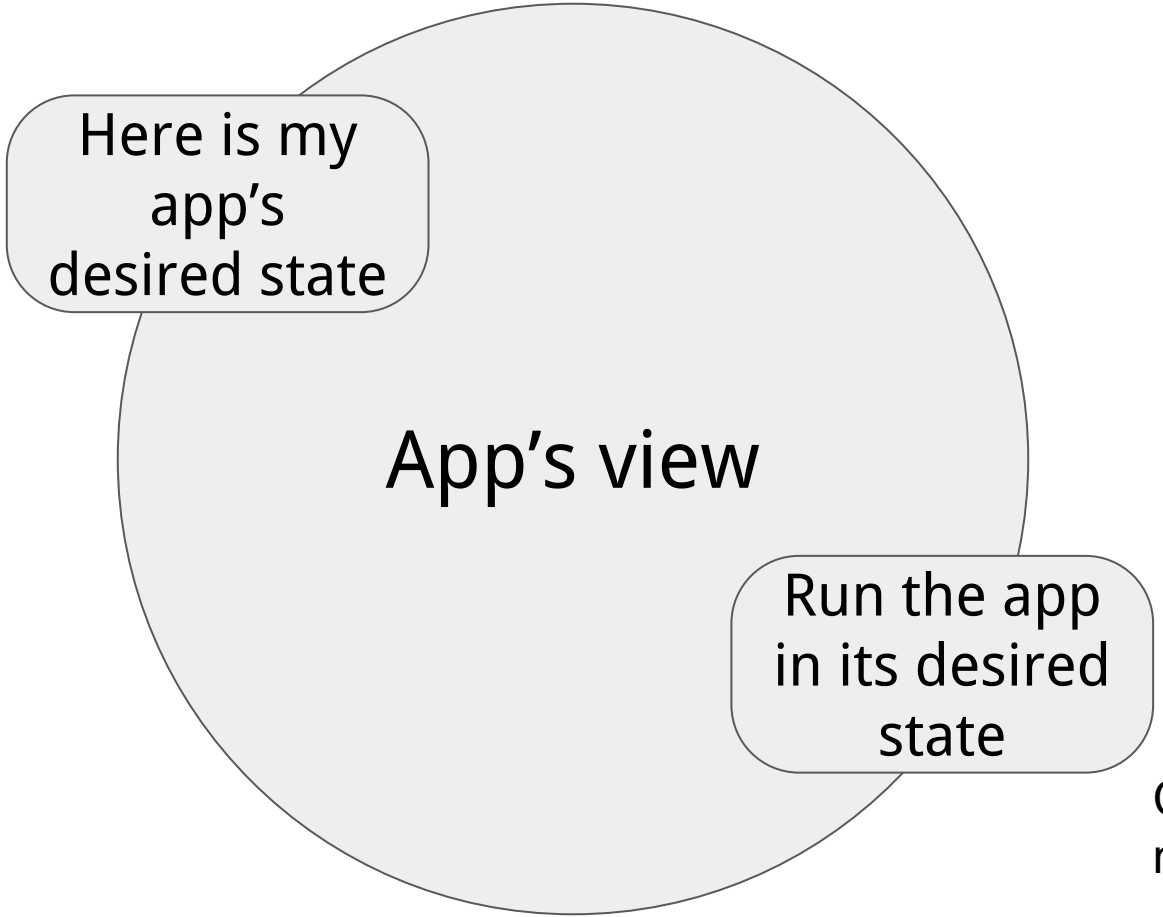
Image from http://www.creatiline.com/tag/dog-clip-art-black-and-white


Deploy
Implement desired state
Provision
Observe the current state
Converge current state to the desired state


Describe the desired state
App’s view
Observe the current state
Run the app in its desired state
Converge current state to the desired state

A format to build + ship + run

Policies to describe the desired state

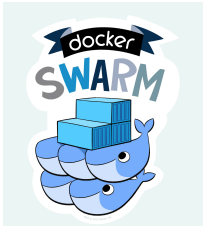


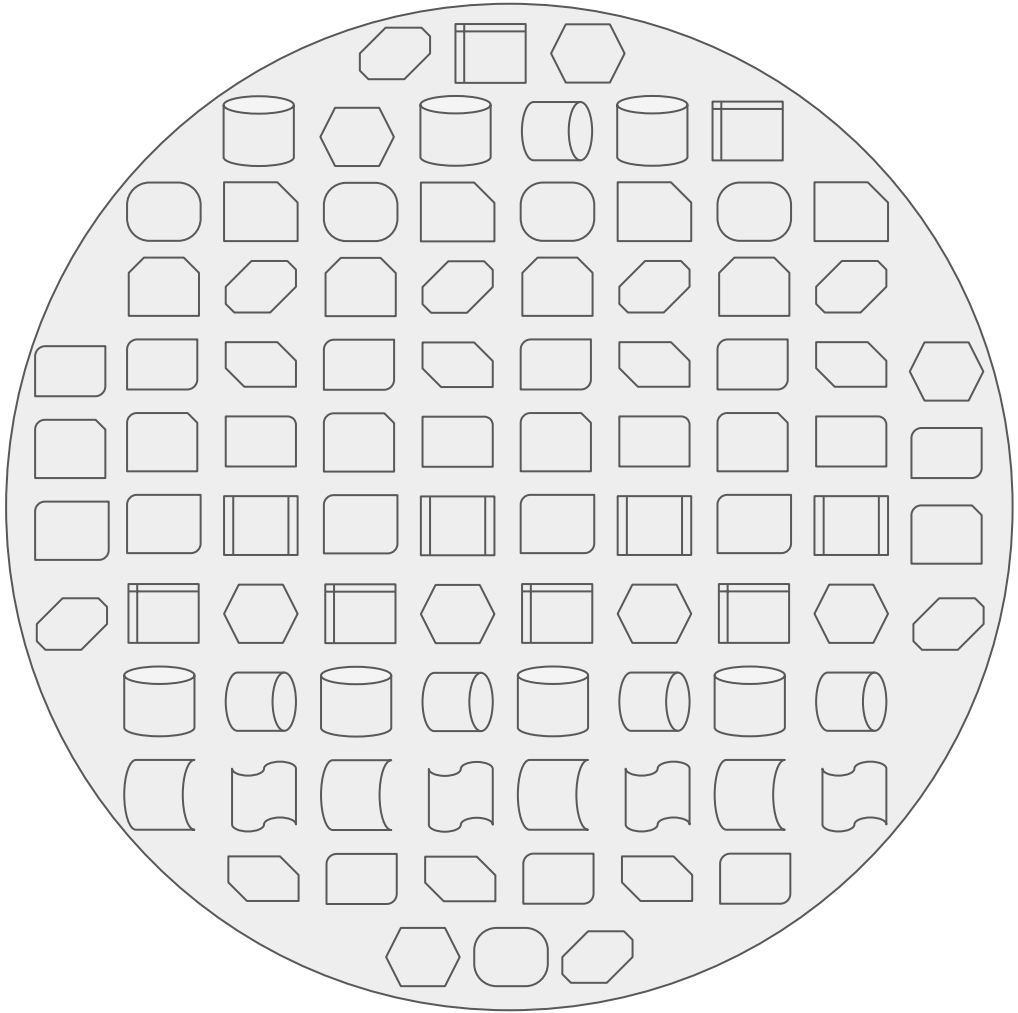
Cluster manager

Containers matter … to standardize how to build, ship and run

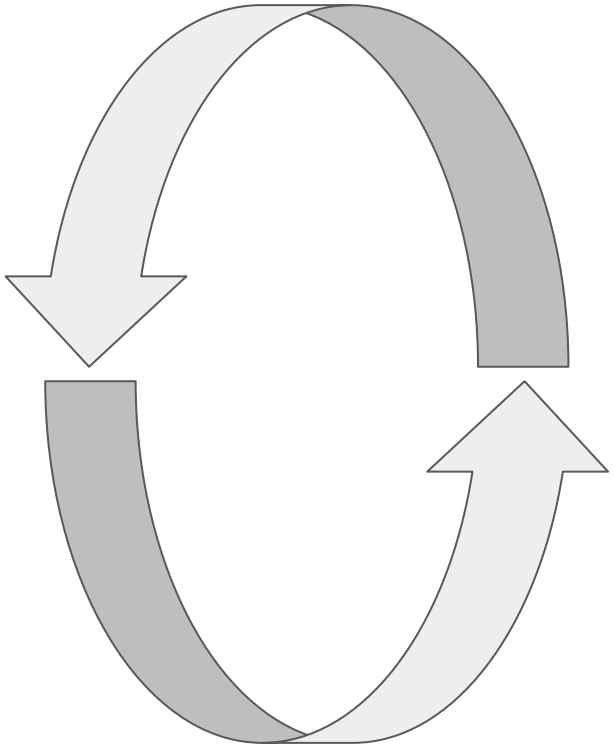
Cluster managers matter … to let apps declare intent and to coerce the infrastructure to maintain that intent

Nomad

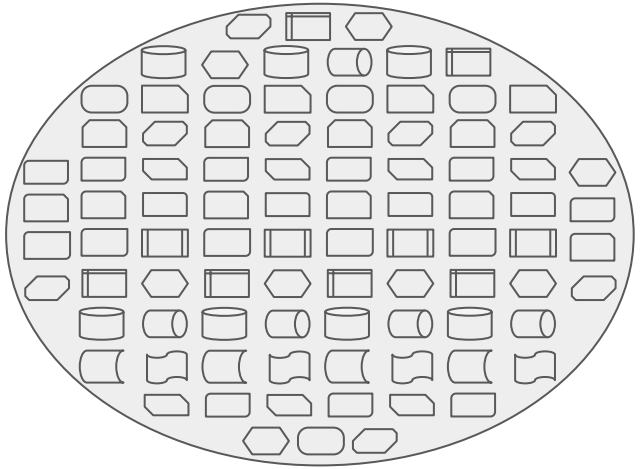




1. Genericity



2. Declarative



Cluster manager

Compute | Network | Storage | ...

3. Hide full infrastructure stack

Disposable infrastructure

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