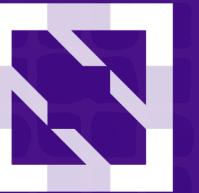




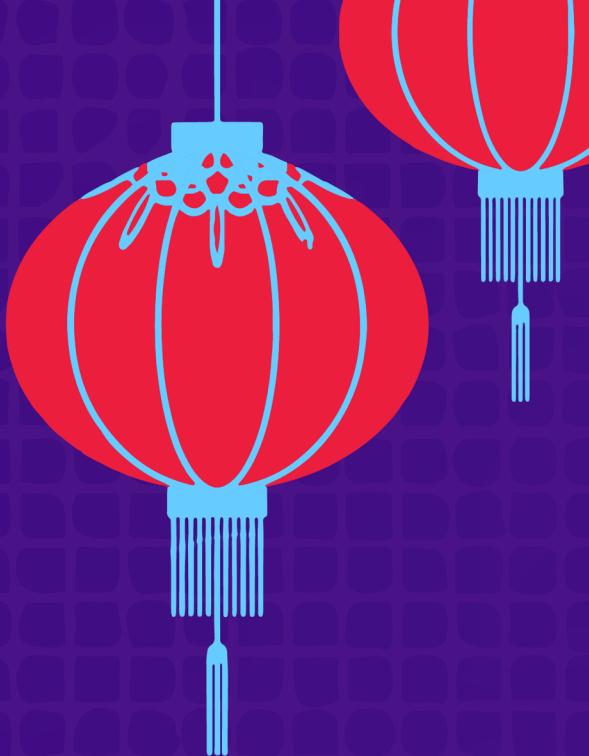
KubeCon



CloudNativeCon

 OPEN SOURCE SUMMIT

China 2019





Dragonfly Introduction

Zuozheng Hu(胡作政), Alibaba
Jing Zhang(张劲), Alibaba



KubeCon



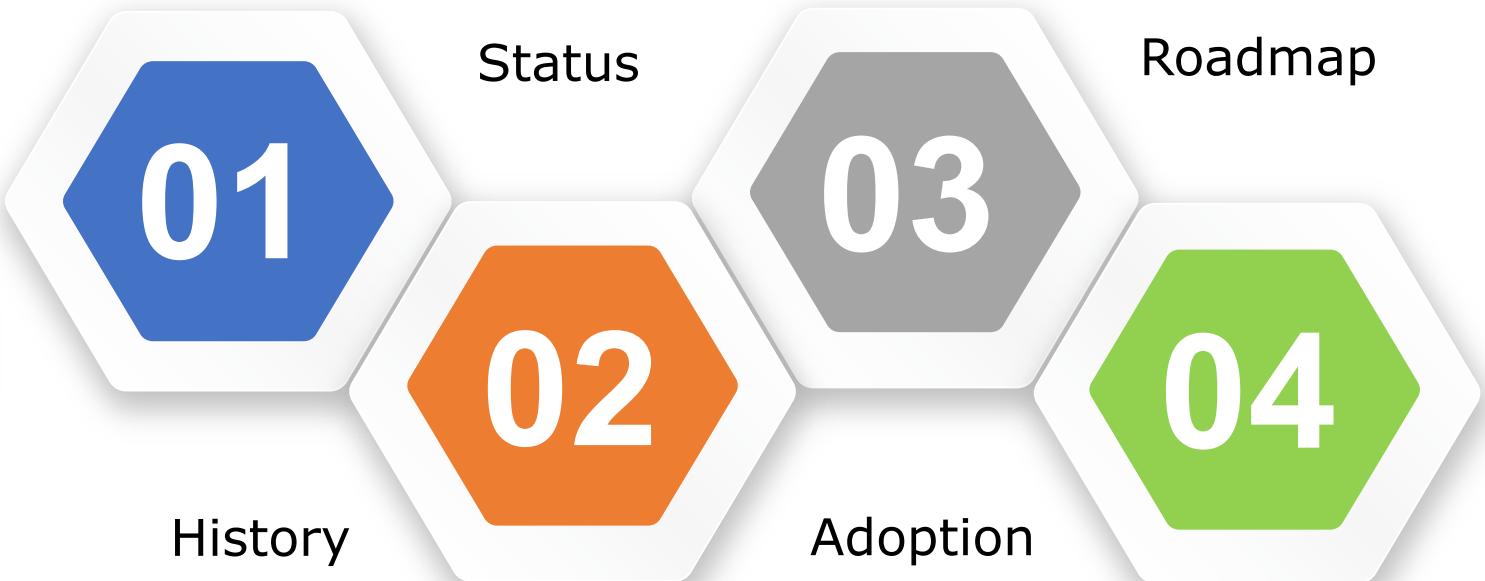
CloudNativeCon



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Agenda



01

PART ONE

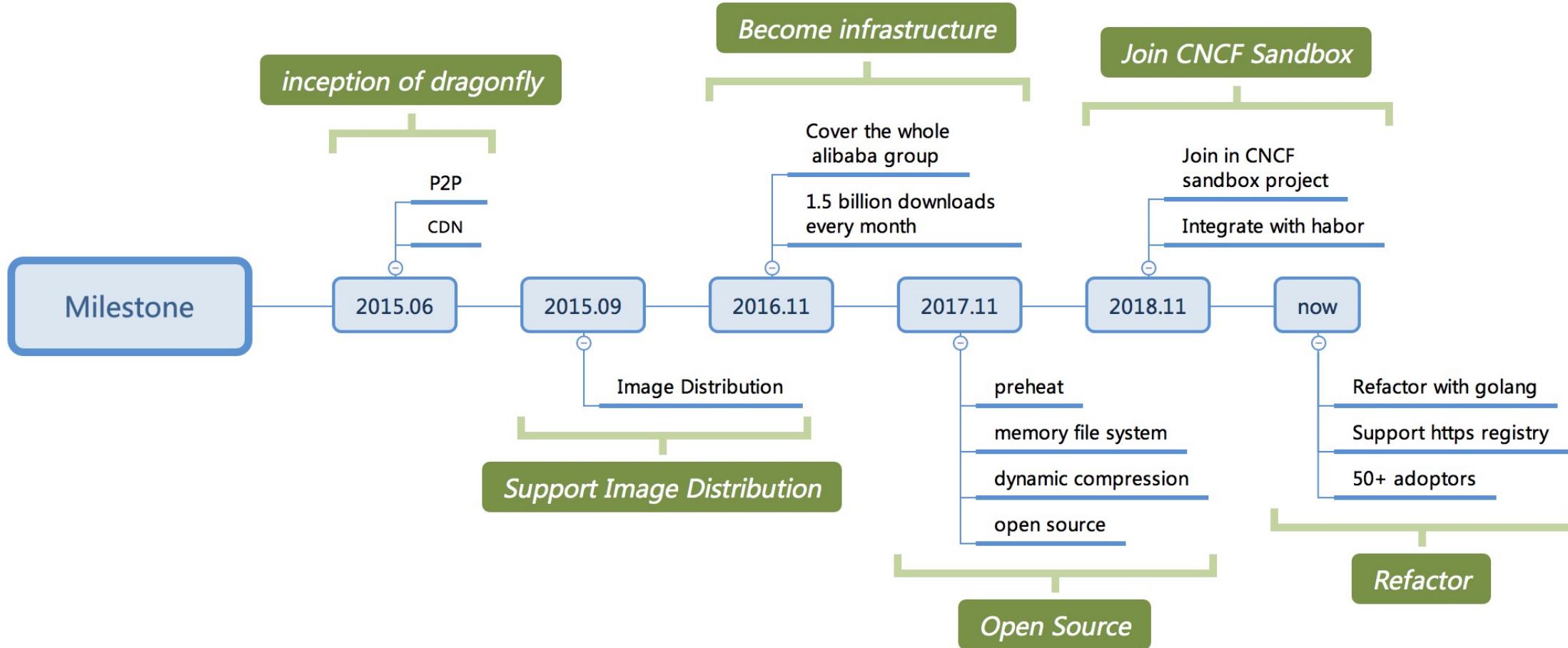
History



What and Why

- P2P based, high reliable, image distribution system at large scale
- Bottleneck in pulling images in DCs of Alibaba Group

Milestone





02



PART TWO

Status

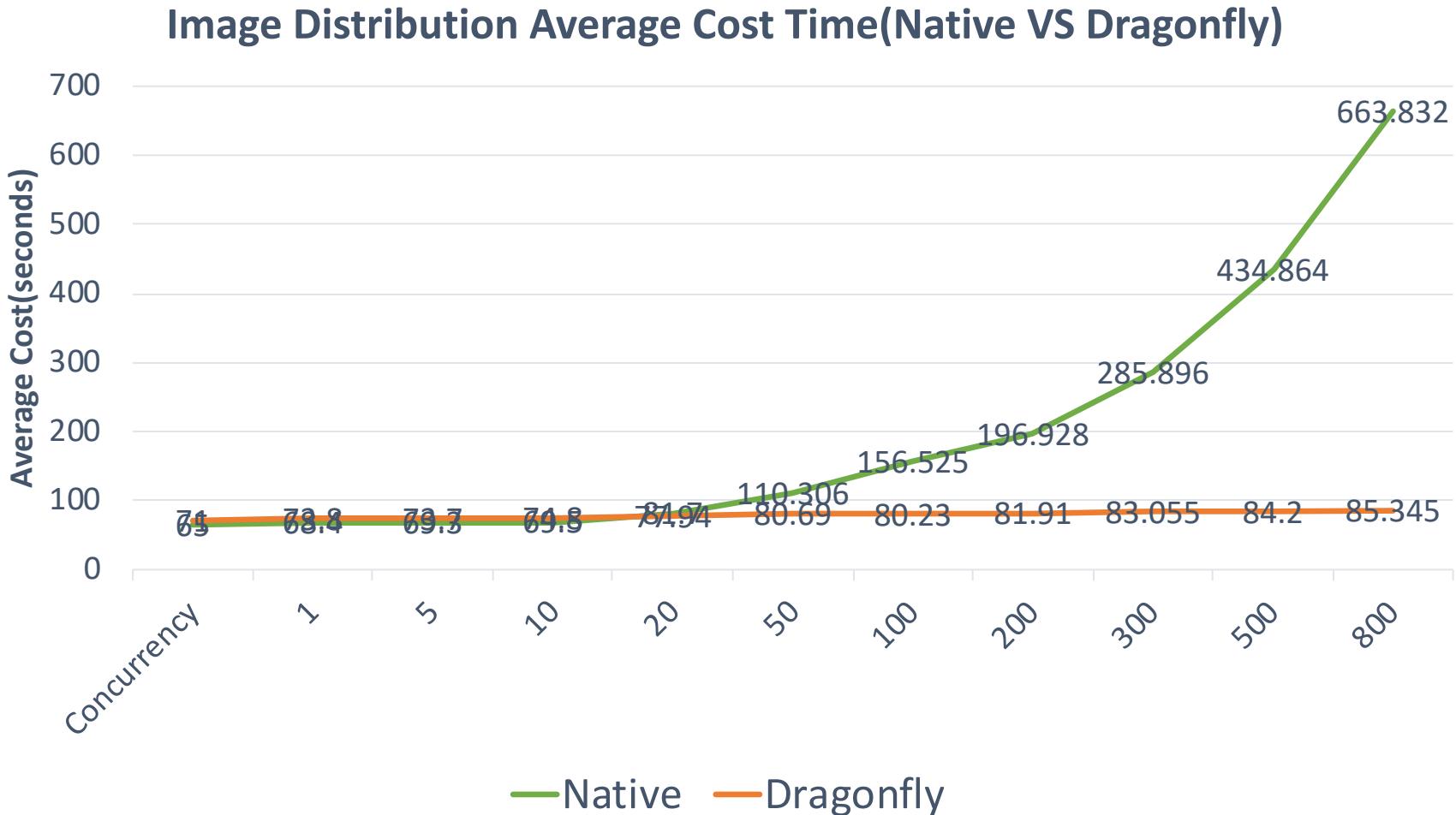
Native vs Dragonfly

Testing conditions:

- ◆ Server: 2 VMs(24C64G, SSD, 1000Mb/s)
- ◆ Client: 200 VMs(4C8G, 100Mb/s)

Conclusion:

- Dragonfly is more smoothly than native
- With the expansion of the scale, dragonfly's advantage becomes more and more obvious



Community Situation

Stars: 3400+

Adoptors: 50+

Maintainers: 6

Outside: 1 ebay, 1 meitu

Internal: 4 alibaba group

Contributors: 32

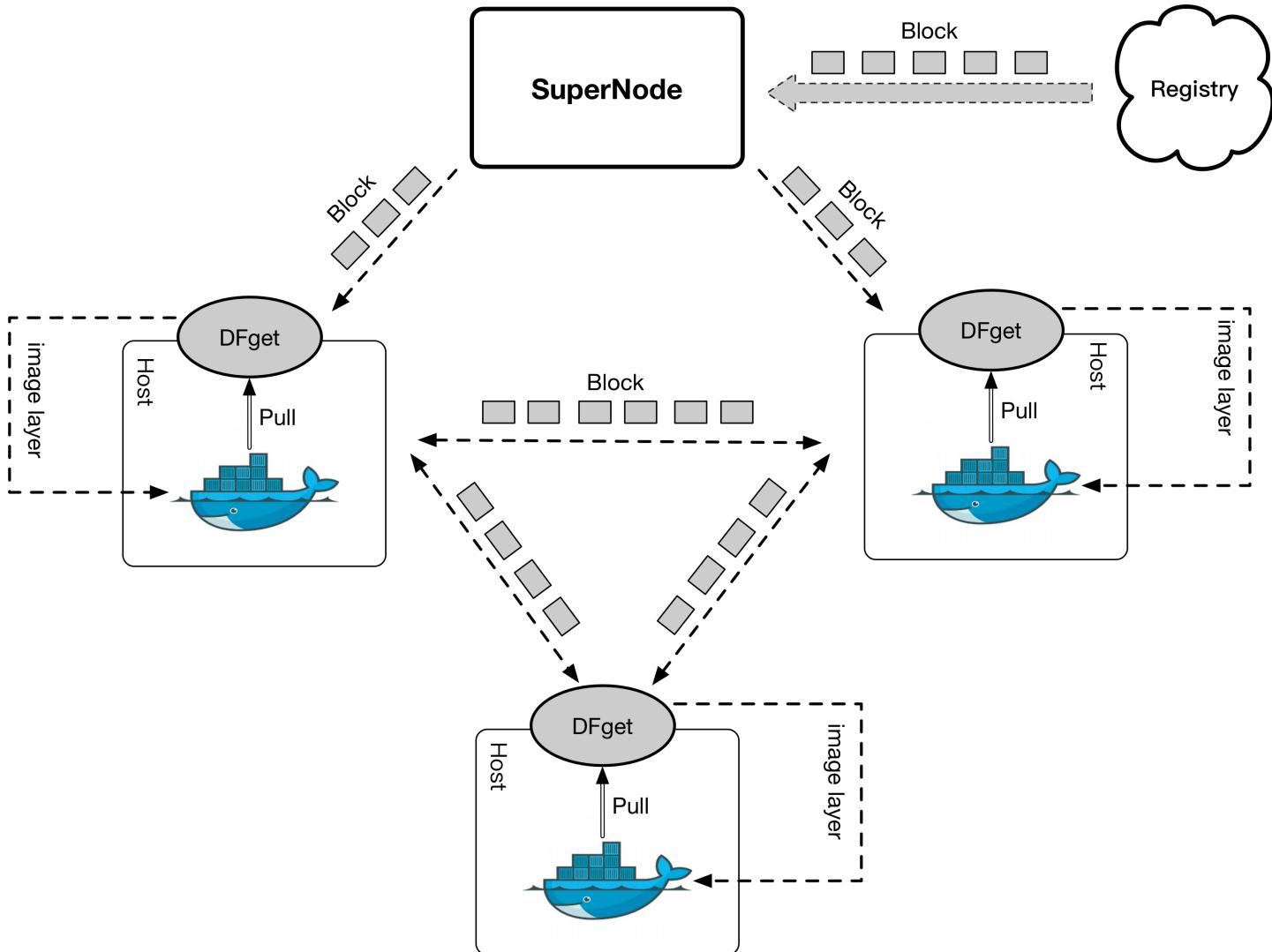
Discussion Group:

DingTalk: 23304666

Gitter: please refer to Github

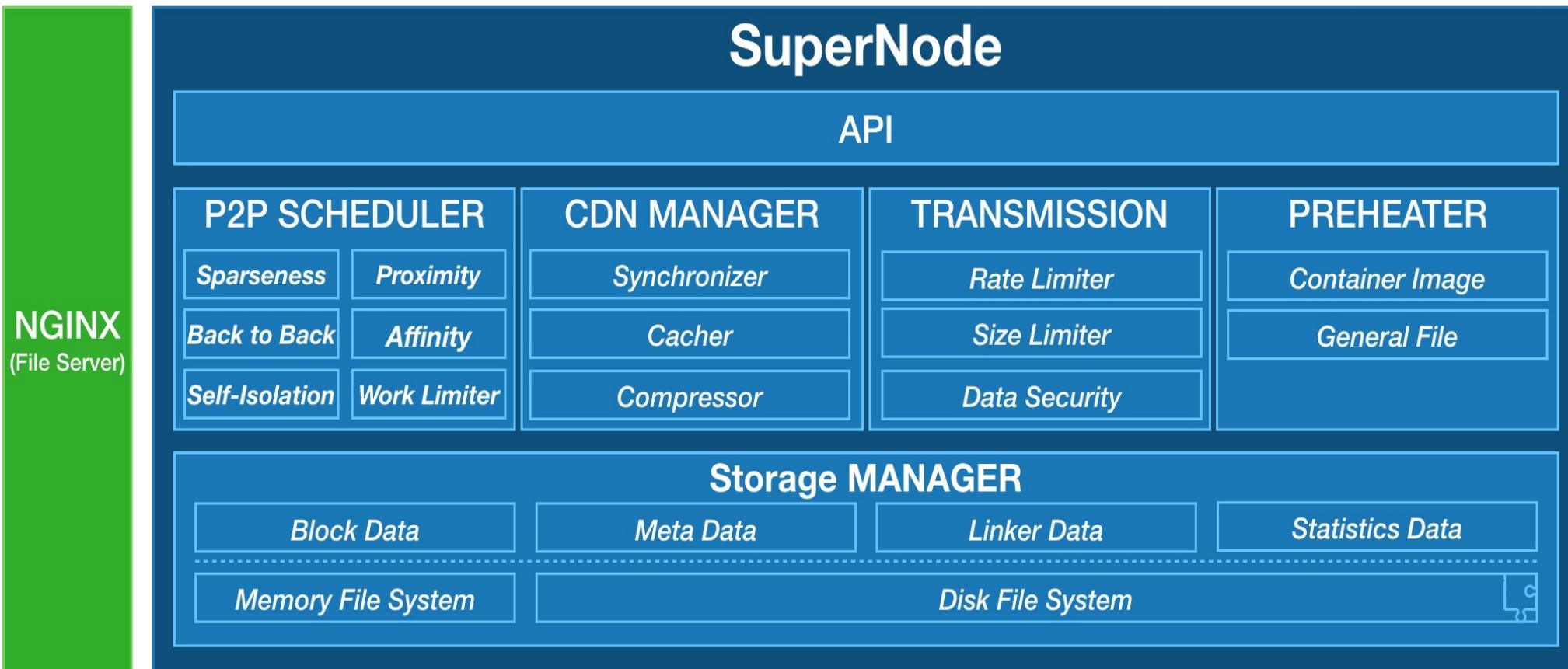


P2P Mechanism



Supernode ARC

Dragonfly dose its best to speed up download and save traffic!

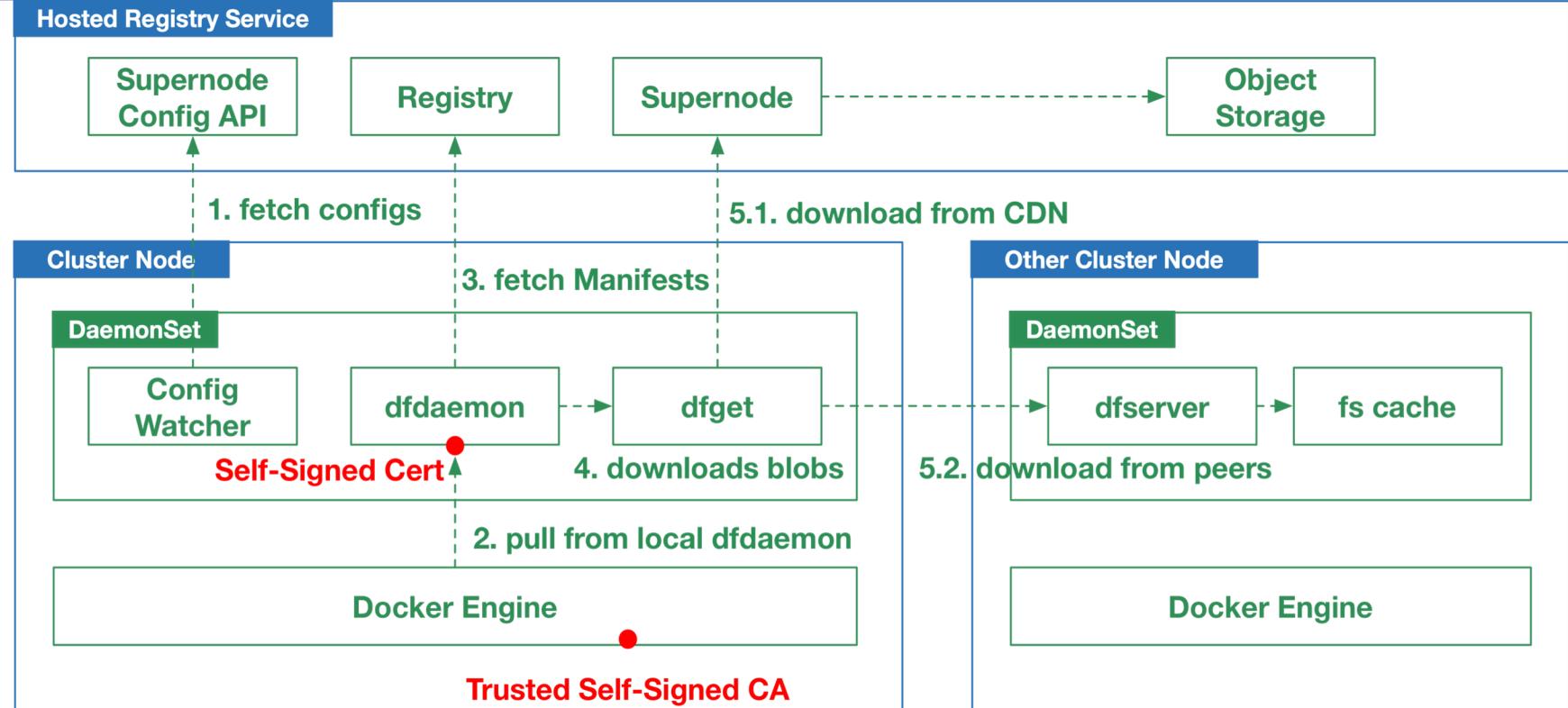


03

PART THREE

Adoption

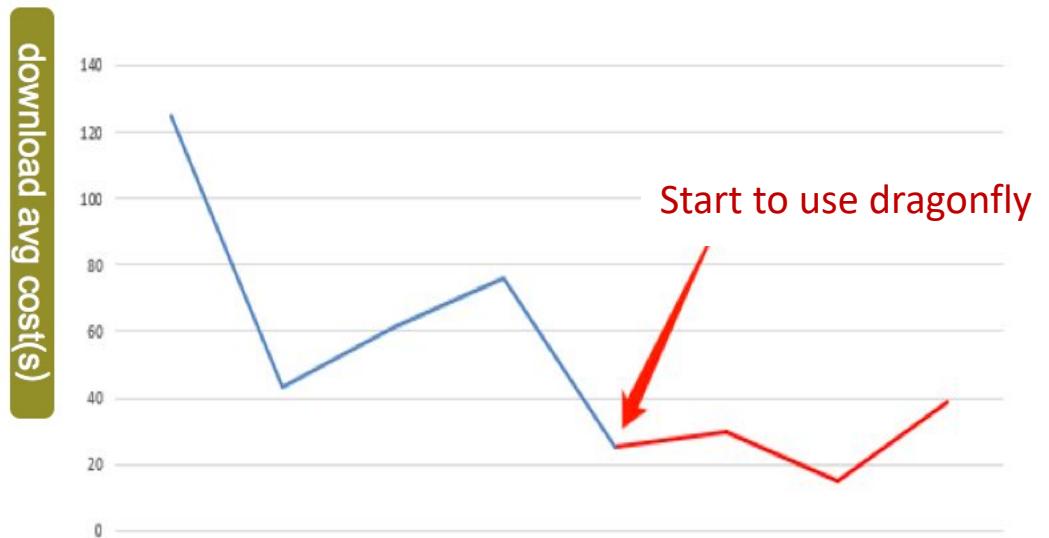
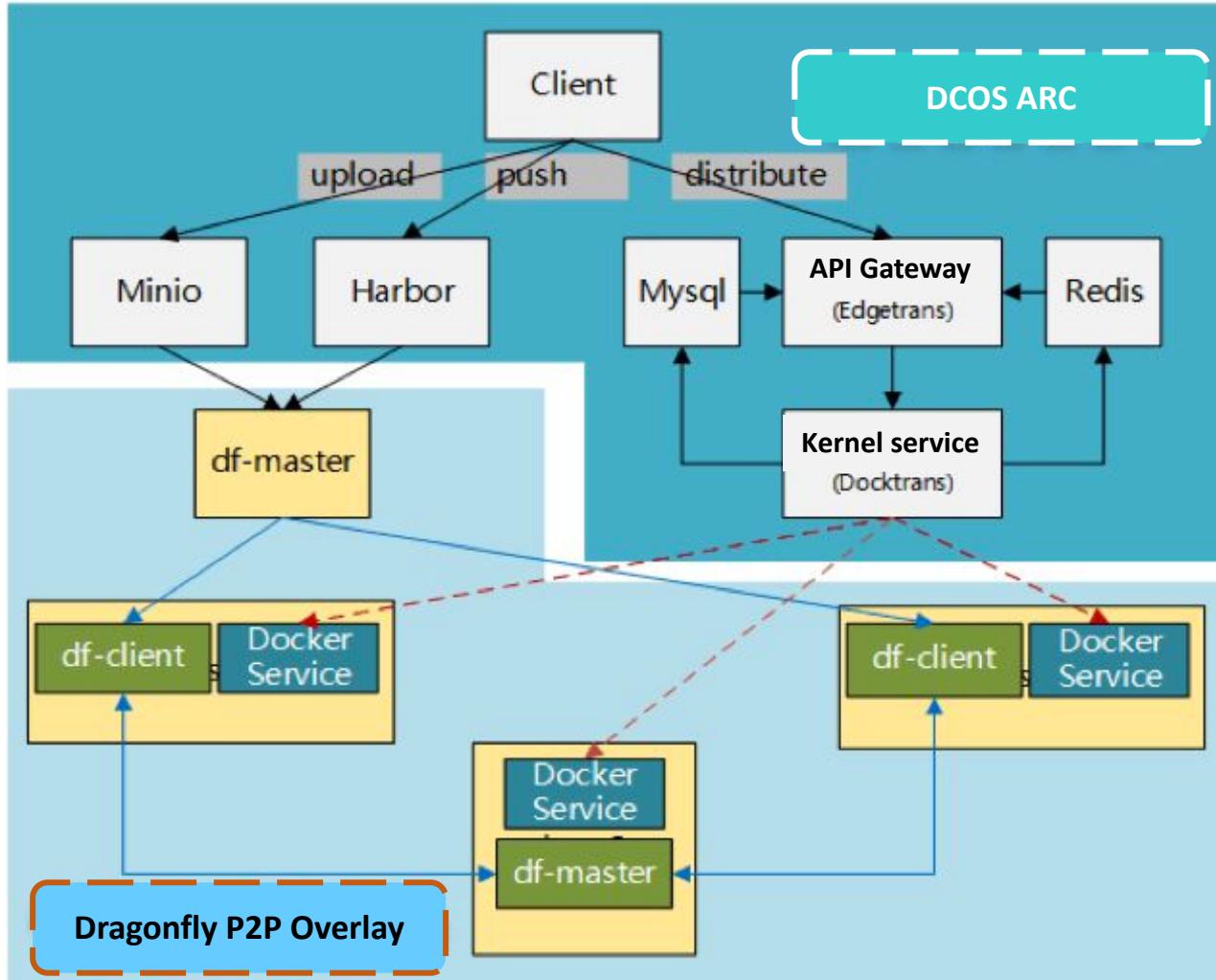
Practice in Alibaba Cloud



ACR(Alibaba Container Registry Service) provides two registry domains, one for normal cases, the other is for P2P distributed pulls, which always points to localhost.

ACR's P2P image distribution asks users to deploy a DaemonSet in their Kubernetes cluster, and copy a Self-Signed CA to Docker's configuration path. After this, every node will have a pod running as a registry proxy, then Docker can pull new images using the P2P domain, without any interruption or restart of any containers.

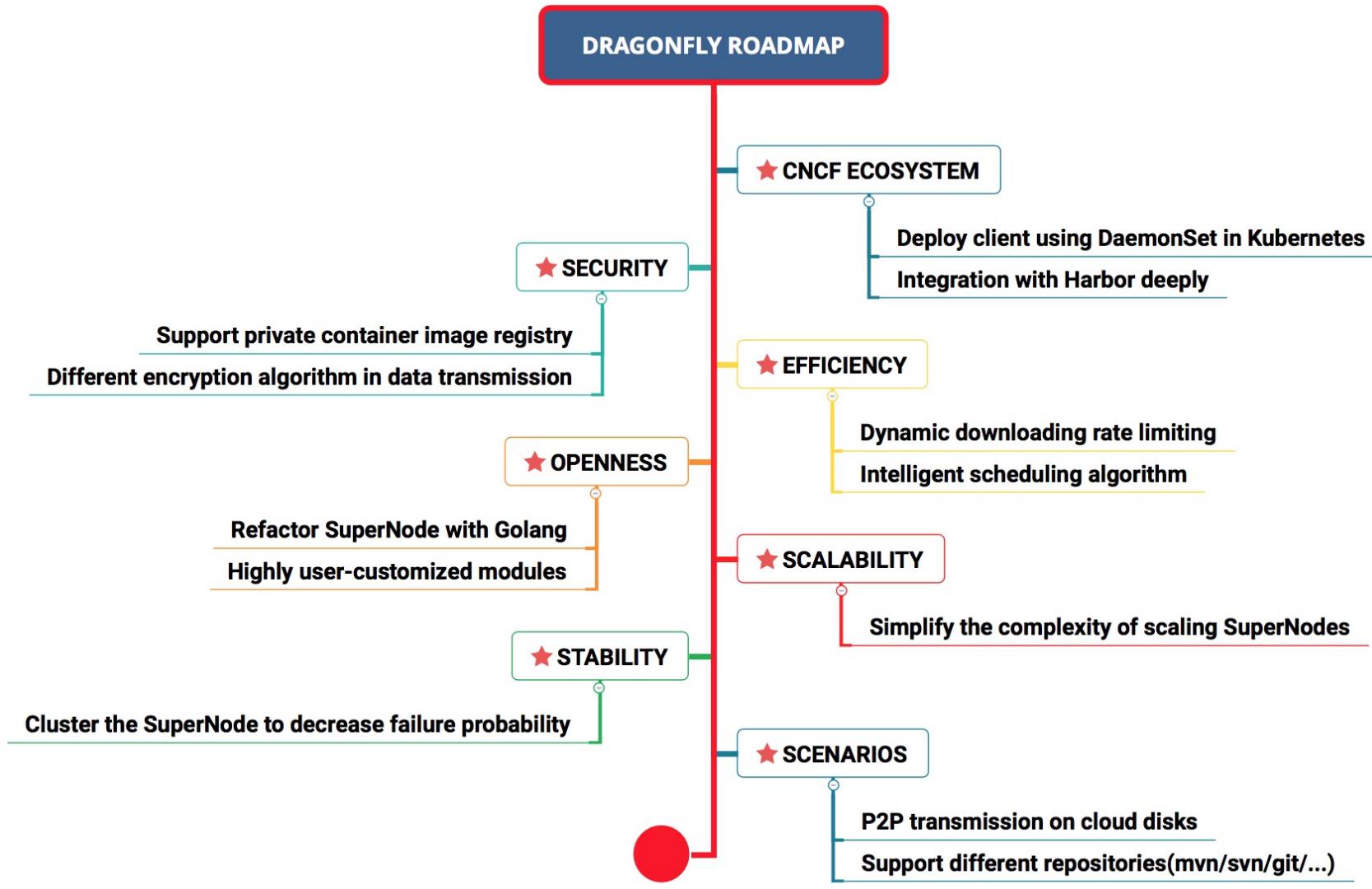
Practice in ZJ Mobile



04

PART FOUR

Roadmap



Thanks

