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CHIDORI

AI/ML Cluster Management



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Incorta

Chidori - AI/ML Cluster
Management Platform

Conf42 Cloud Native 2024

Thursday • March 21 • kick-off 5PM GMT



CONF42

Agenda

1

Spark on Kubernetes

2

Challenges

3

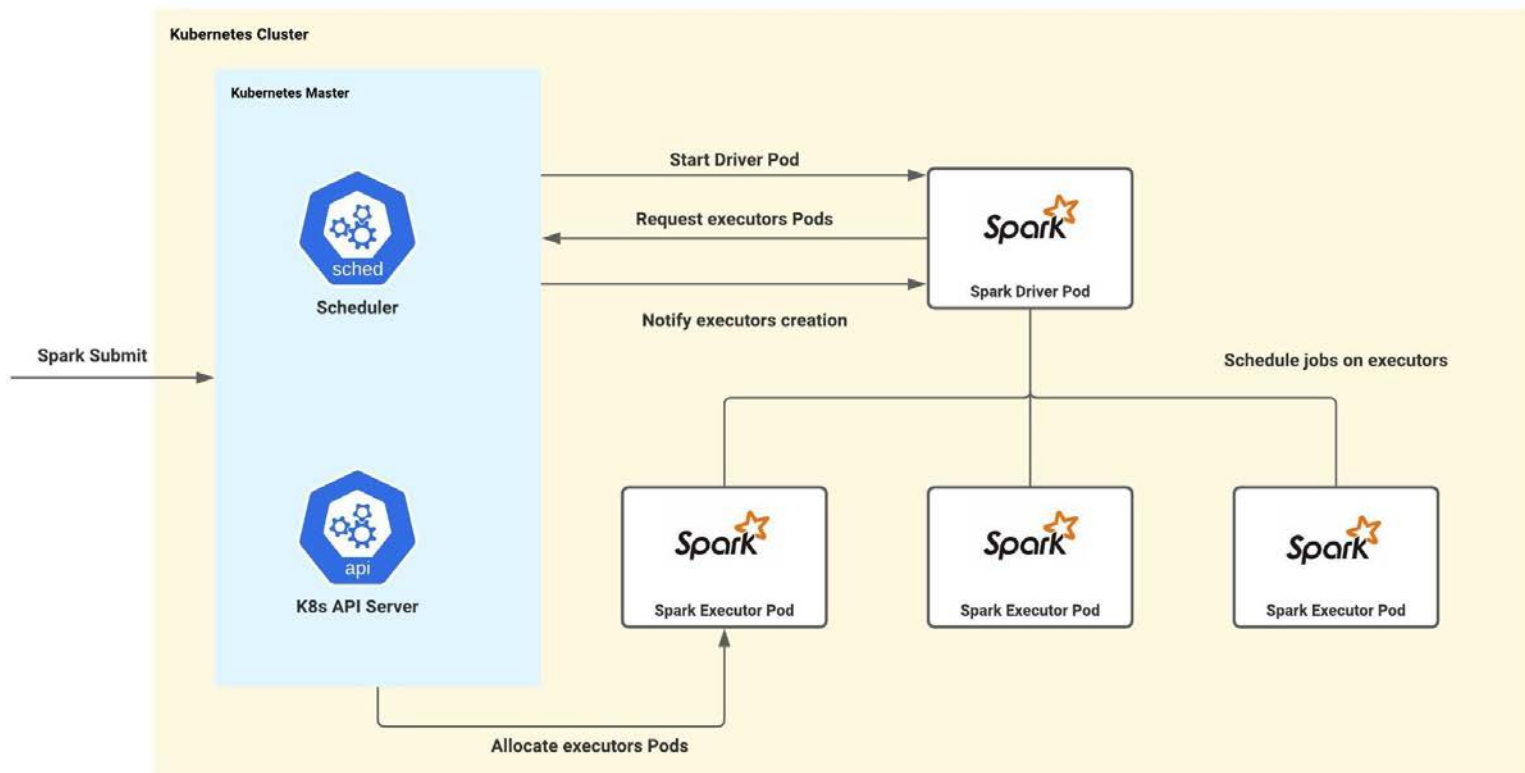
Chidori

4

Demo



Spark On Kubernetes

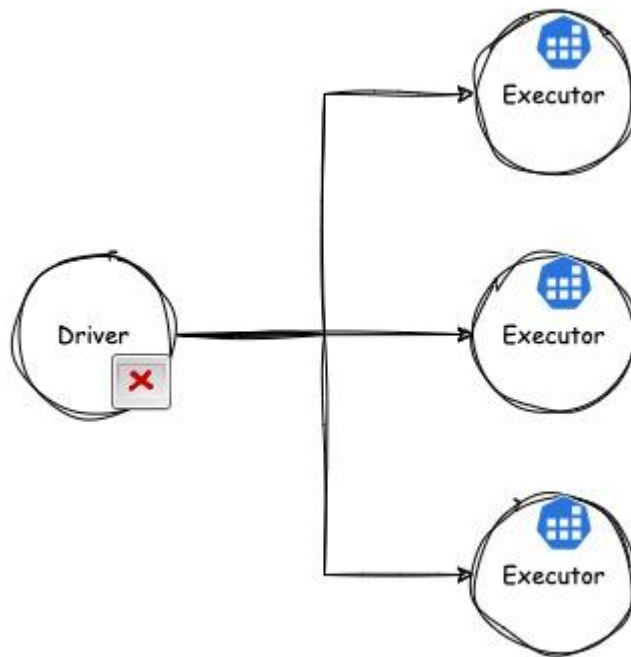


Advantages

- Cluster Autoscaling
- Dynamic Allocation
- Use Spot nodes with Spark workloads
- Optimize Spark scratch space

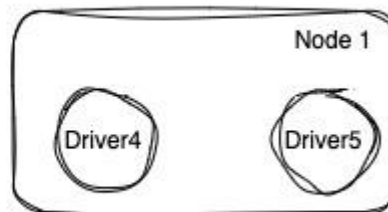
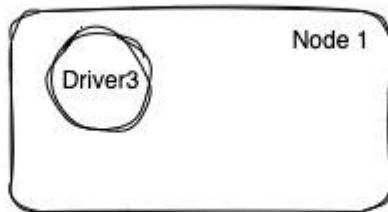
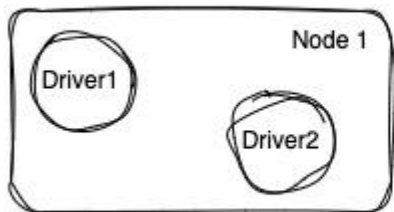
Challenges

- Naked Pod / Availability



Challenges

- Drivers Pods Distribution across Nodes



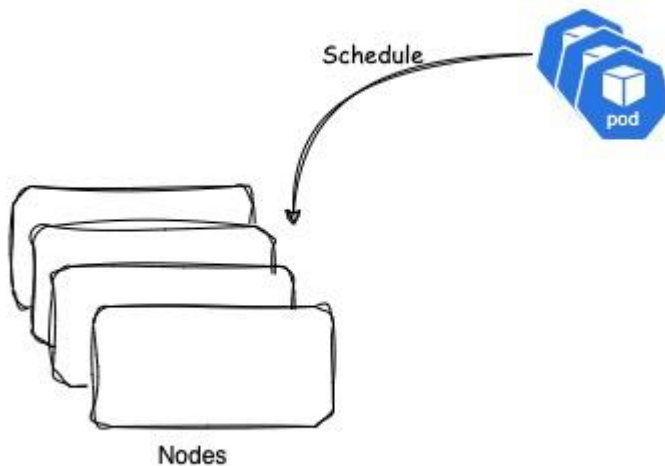
Challenges

- Startup time overhead



Challenges

- Default K8S Scheduler



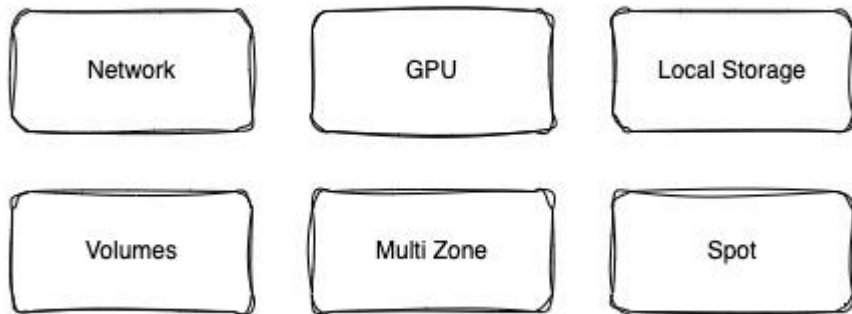
Challenges

- Dependency Management



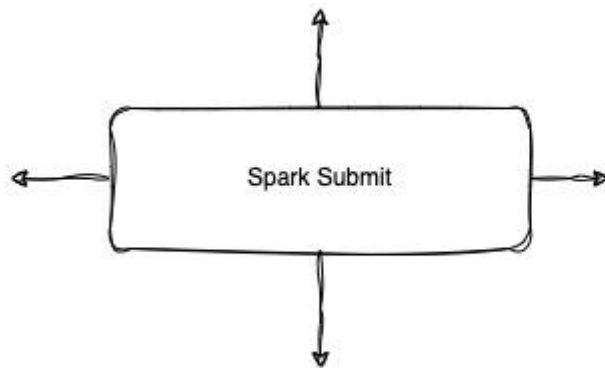
Challenges

- Topology Awareness



Challenges

- Integrations and Monitoring

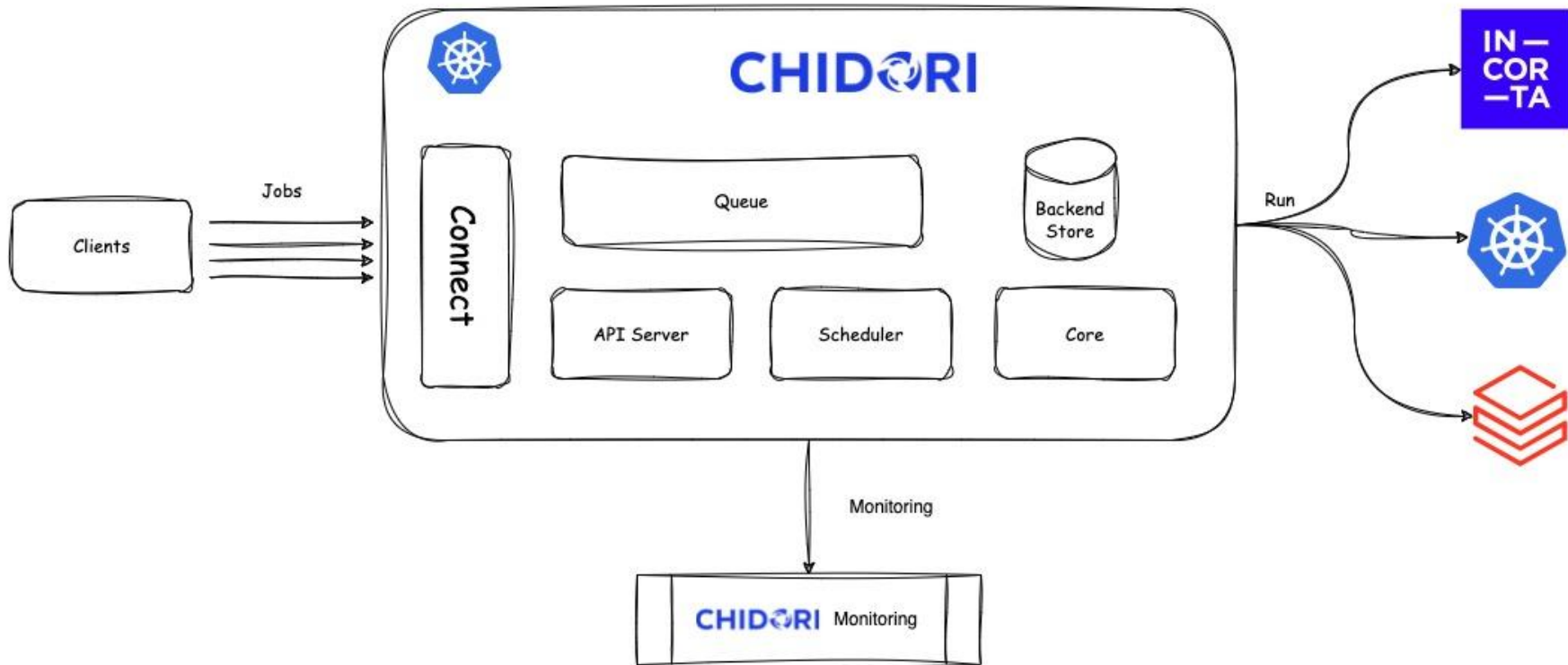


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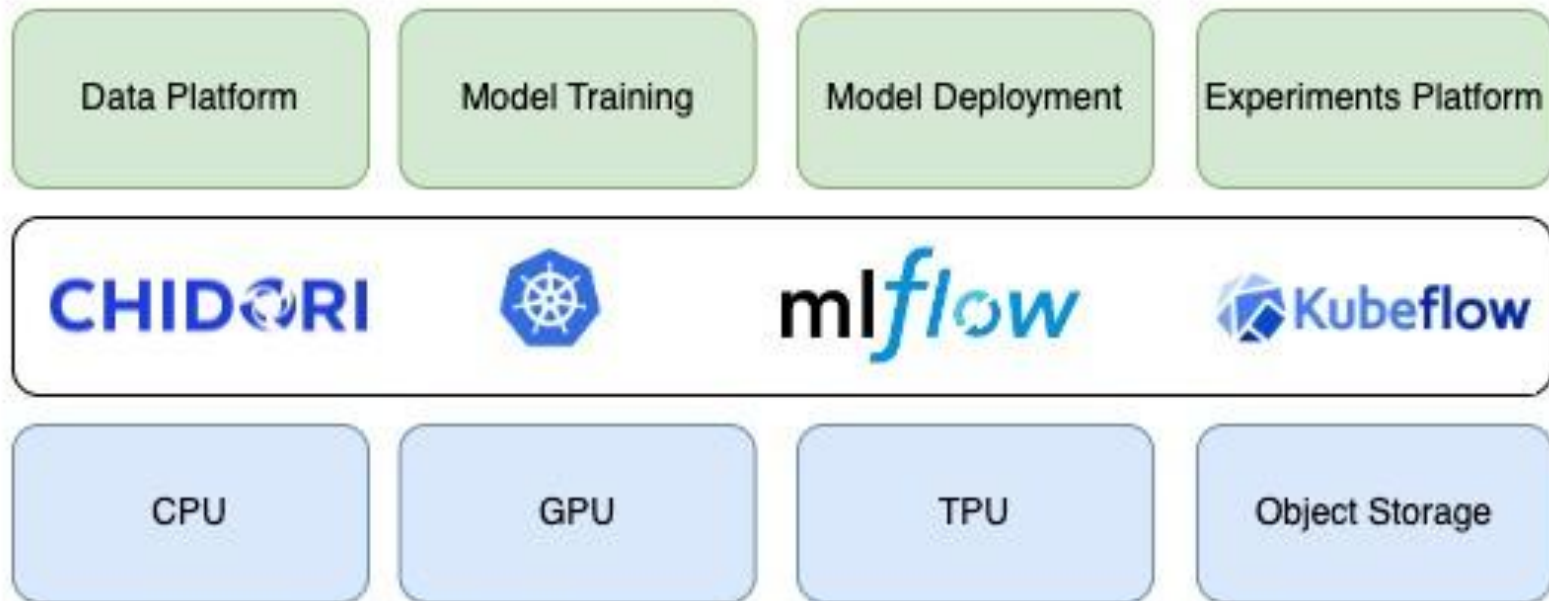
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High Level Design



AI/ML Cluster Management



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Thank you!

