



KubeCon



CloudNativeCon

North America 2024





KubeCon



CloudNativeCon

North America 2024

SIG-Apps: Powering Applications with High-Volume Data and APIs

Janet Kuo, Google

Maciej Szulik, Defense Unicorns



Janet Kuo, Google [@janetkuo](#)

Kubernetes contributor since 2015

Kubernetes Workloads APIs

First contribution [Docs for dev console](#)

Jun 23, 2015

Maciej Szulik, Defense Unicorns [@soltysh](https://twitter.com/soltysh)

Kubernetes contributor since 2014
Kubernetes Workloads and Batch APIs
Kubernetes CLI
Steering Committee
First contribution [spf13/cobra update](#)
Dec 19, 2014





Kenneth Owens, Snowflake [@kow3ns](#)

Kubernetes contributor since 2017

Kubernetes Workloads APIs

First contribution [StatefulSet refactoring](#)

Feb 2, 2017

SIG Apps

batch

Job, CronJob

apps

Deployment, DaemonSet,
ReplicaSet, StatefulSet

policy

PodDisruptionBudget

Early days



KubeCon



CloudNativeCon

North America 2024



Kubernetes v0.2 - September 9, 2014

API

v1beta1 -> v1beta2 -> v1beta3

Resources

Pods, ReplicationController, Service, Endpoint, Event, Minion

Misc

kubecfg -> kubectl

binion -> node

basic authentication

Kubernetes v1.0 - July 10, 2015

API

v1 & v1beta3

Misc

Pluggable scheduler

Basic admission

Refinement



KubeCon



CloudNativeCon

North America 2024



Controllers

Deployment, DaemonSet, Job (v1.1)

ReplicaSet (v1.2)

PodDisruptionBudget, PetSet (v1.3)

ScheduledJob (v1.4)

PetSet -> StatefulSet (v1.5)

SScheduledJob -> CronJob (v1.5)



API

batch, extensions (v1.2)

apps, policy (v1.3)

ThirdPartyResource (v1.1)

-> CustomResourceDefinition (v1.7)

Controller expansion

RollingUpdate in DaemonSet (v1.6)

DaemonSet History & Rollback (v1.7)

RollingUpdate in Statefulset (v1.7)

MaxUnavailable in PodDisruptionBudget (v1.7)

BackoffLimit in Job (v1.8)

Job TTL controller (v1.12)

apps /v1 (v1.9) - GA



Miscellaneous

Kubernetes Enhancement Proposal (v1.4)

5000 nodes (v1.6)

Special Interest Groups (v1.8)

KEP 1635: Require Transition from Beta (v1.20)

YOU SHALL NOT PASS!



CronJob batch/v1beta1
since v1.8

PodDisruptionBudget
policy/v1beta1
since v1.3

Controller expansion (GA features)

CronJob v1 (v1.21)

CronJob Controller v2 (v1.22)

PodDisruptionBudget v1 (v1.21)

MinReadySeconds in StatefulSet (v1.22)

MaxSurge in DaemonSet (v1.25)

StartOrdinal in StatefulSet (v1.31)

Auto remove PVCs created by StatefulSet (v1.32)

Controller expansion (GA features)

Job tracking w/o linkgering Pods (v1.23)

Elastic Indexed Jobs (v1.24)

Suspend in Job (v1.24)

Retriable and non-retriable Pod failures in Job (v1.26)

TimeZone in CronJob (v1.27)

Elastic IndexedJob (v1.27)

Backoff Limit per Index (v1.29)

JobSuccessPolicy (beta in v1.31)

JobPodFailurePolicy, PodDisruptionConditions (v1.31)

managedBy to delegate the Job synchronization (beta in v1.32)

Miscellaneous

CRON_TZ/TZ snafu (v1.23)

WG-Batch (v1.24)

WG-Serving (v1.30)



The future



KubeCon



CloudNativeCon

North America 2024



The backlog is very,.... very long

More granular PodFailurePolicy

Node maintenance

MaxUnavailable in StatefulSet

Update VolumeClaimTemplate in StatefulSet

Consolidated workload controllers status



Biweekly meeting:

Mondays at 12:00 PM EDT / 09:00 AM PDT / 06:00 PM CEST

Slack:

[#sig-apps](#)

Mailing list:

kubernetes-sig-apps@googlegroups.com

