

Kubernetes 1.11



OpenShift
Commons
Briefing
July 27th 2018

Schedule

- RC1: Today!
- Final Release: June 26th (hopefully)
- 1.11.1
likely 2 weeks later, the way things have been going.

Features

- KubeDNS → CoreDNS
- Dynamic Kubelet Config
- More CRD Features
- Priority & Preemption
- More Windows Features
- IPVS Load-balancing

KubeDNS → CoreDNS

- Simpler/Faster
- Single go binary
- Better maintained (CNCF project)
- Not automatically installed in upgraded clusters

Dynamic Kubelet Config

Kubelet: the kubernetes daemon on each system.

Old Way: change kubelet settings by changing startup flags and restart.

New Way: change via configuration file and/or ConfigMap, make many changes without restarting.

More CRD Goodness

CRD: Custom Resource Definition, aka “Kubernetes-native application”.

- Monitoring endpoint for CRDs (status).
- CRD integration with autoscaling
- CRD versions: track upgrades of CRDs

Priority & Preemption

Ability to say “you must run this pod now, even if it means evicting running pods from nodes to do it.”

- Run urgent cronjobs
- Run debuggers during overload
- Bump overloaded services for better, replacement services

More Windows Plumbing

We get closer every day to “windows-native”
Kubernetes (currently in alpha).

IPVS load-balancing

- Use in-kernel networking tools for load-balancing kubernetes services
 - (requires recent kernel)
- Faster, lighter
- Allows self-hosting

Try out RC1 Soon

- Install via Kubeadm
 - <https://kubernetes.io/docs/setup/independent/create-cluster-kubeadm/>
- Try out the new features
- File bugs!

Upcoming

- Kubernetes Anniversary July 18th, sponsored party!
 - Special guests!
 - Kubernetes pub quiz!
 - Beer!
- Late July: Nomad + Basics of Helm
- Wanna speak?
 - Form link from <https://www.meetup.com/Cloud-Native-PDX/>

OSCON

- July 16-19 at the OCC
- Many cloud-native topics
- 25% discount code: Josh25

Thank you to gift sponsor O'Reilly!

KubeCon Seattle

- CfP now open!
- Ends August 12
- <https://events.linuxfoundation.org/events/kubecon-cloudnativecon-north-america-2018/program/call-for-proposals-cfp/>

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