



kubernetes

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Awesome-Kubernetes



A curated list for awesome kubernetes sources Inspired by [@sindresorhus' awesome](#)



"Talent wins games, but teamwork and intelligence wins championships."

-- Michael Jordan

Without the help from these [amazing contributors](#), building this awesome-repo would never has been possible. Thank You very much guys !!

Thanks to Gitbook. This awesome list can now be downloaded and read in the form of a book. Check it out --> <https://www.gitbook.com/book/ramitsurana/awesome-kubernetes/>. Keep Learning Keep Sharing !!

If you see a package or project here that is no longer maintained or is not a good fit, please submit a pull request to improve this file. Thank you!

If you are interested in becoming a maintainer for the awesome kubernetes list. Please drop me a mail at ramitsurana@gmail.com with your name and github id. Thanks

What is Kubernetes? :ship:

Kubernetes is an open source orchestration system for Docker containers. It handles scheduling onto nodes in a compute cluster and actively manages workloads to ensure that their state matches the users declared intentions. Using the concepts of "labels" and "pods", it groups the containers which make up an application into logical units for easy management and discovery.

Source: [What is Kubernetes](#)

History:

Kubernetes is known to be a descendant of Google's system BORG

The first unified container-management system developed at Google was the system we internally call Borg. It was built to manage both long-running services and batch jobs, which had previously been handled by two separate systems: Babysitter and the Global Work Queue. The latter's architecture strongly influenced Borg, but was focused on batch jobs; both predated Linux control groups.

Source: [Kubernetes Past](#)

Date of Birth:

Kubernetes celebrates its birthday every year on 21st July. The project was born in the year 2015.

Roadmap

The awesome-kubernetes will now soon be available in the form of different releases and package bundles, It means that you can download the awesome kubernetes release up to a certain period of time, The release for awesome kubernetes 2015 bundle is released. Checkout the releases column for more info. Stay tuned for more updates.

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Starting Point

A place that marks the beginning of a journey

- [Are you Ready to Manage your Infrastructure like Google?](#)
- [Google is years ahead when it comes to the cloud, but it's happy the world is catching up](#)
- [An Intro to Google's Kubernetes and How to Use It](#) by [Laura Frank](#)
- [Getting Started on Kubernetes](#) by [Rajdeep Dua](#)
- [Kubernetes: The Future of Cloud Hosting](#) by [Meteorhacks](#)
- [Kubernetes by Google](#) by [Gaston Pantana](#)
- [Key Concepts](#) by [Arun Gupta](#)
- [Application Containers: Kubernetes and Docker from Scratch](#) by [Keith Tenzer](#)

- [Learn the Kubernetes Key Concepts in 10 Minutes](#) by Omer Dawelbeit
- [Top Reasons Businesses Should Move to Kubernetes Now](#) by Mike Johnston
- [The Children's Illustrated Guide to Kubernetes](#) by Deis
- [The 'kubectl run' command](#) by Michael Hausenblas

Main Resources

Official resources from the Kubernetes team

- [Kubernetes Documentation](#)
- [Kubernetes Source](#)
- [Kubernetes Troubleshooting](#)

Useful Articles

A piece of writing included with others in a newspaper, magazine, or other publication

- [Kubernetes: Getting Started With a Local Deployment](#)
- [Installation on Centos 7](#)
- [Packaging Multiple Resources together](#)
- [An Introduction to Kubernetes](#) by Justin Ellingwood
- [Scaling Docker with Kubernetes](#) by Carlos Sanchez
- [Creating a Kubernetes Cluster to Run Docker Formatted Container Images](#) by Chris Negus
- [Containerizing Docker on Kubernetes !!](#) by Ramit Surana
- [Running Kubernetes Example on CoreOS, Part 1](#) by Kelsey Hightower
- [Play With Kubernetes Quickly Using Docker](#)
- [1 command to Kubernetes with Docker compose](#) by Sebastien Goasguen
- [Nginx Server Deployment using Kubernetes](#) by Rajdeep Dua
- [What even is a kubelet?](#) by Kamal Marhubi
- [Kubernetes from the ground up: the API server](#) by Kamal Marhubi
- [Kubernetes 101 – Networking](#) by Jon Langemak
- [Dynamic Kubernetes installation/configuration with SaltStack](#) by Jon Langemak
- [Deploying Kubernetes with SaltStack](#) by Jon Langemak
- [Logging in Kubernetes with Fluentd and Elasticsearch](#) by Jon Langemak
- [Corekube: Running Kubernetes on CoreOS via OpenStack](#) by Mike Metral
- [Networking Kubernetes Clusters on CoreOS with Weave](#) by Weaveworks
- [CoreOS + Kubernetes Step By Step](#) by Coreos
- [Deploying to Kubernetes with Panamax](#) by Brian DeHamer

- [Deploy Kubernetes with a Single Command Using Atomicapp](#) by Jason Brooks
- [Deploying a Bare Metal Kubernetes Cluster](#) by James Kyle
- [AWS Advent 2014 - CoreOS and Kubernetes on AWS](#) by Tim Dsyinger
- [Kubernetes and AWS VPC Peering](#) by Ben Straub
- [Deploy a Kubernetes development cluster with Juju!](#) by Matt Bruzek
- [Try Kubernetes with Vagrant](#) by Christoph Hartmann
- [Keycloak on Kubernetes with OpenShift 3](#) by Marko Strukelj
- [Kubernetes clusters with Oh-My-Vagrant](#) by James
- [Fleet Unit Files for Kubernetes on CoreOS](#) by Michael Hamrah
- [Kubernetes on AWS](#) by CoreOS
- [Testing Kubernetes on AWS](#) by Alan Will
- [Kubernetes: First steps on Amazon AWS](#) by Remco
- [Kubernetes Container Orchestration through Java APIs](#) by Keith Tenzer
- [Containers at Scale with Kubernetes on OpenStack](#) by Keith Tenzer
- [Installing cAdvisor and Heapster on bare metal Kubernetes](#) by Jon Langemak
- [Docker Clustering Tools Compared: Kubernetes vs Docker Swarm](#)
- [Comparison of Networking Solutions for Kubernetes](#)
- [Why Docker and Google Kubernetes Are Like PaaS Done Right](#)
- [Kubernetes Authentication plugins and kubeconfig](#) by Jon Langemak
- [Kubernetes with SaltStack revisited](#) by Jon Langemak
- [Kubernetes Authentication - OpenID Connect](#) by Michael Ward
- [Logging - Kafka topic by namespace](#) by Michael Ward
- [Achieving CI/CD with Kubernetes](#) by Ramit Surana
- [Kubernetes Monitoring Guide](#) by JM Saponaro

Cloud Providers

- [GCE](#) - Google Compute Engine [default]
- [\[GKE\]](#) - Google Container Engine
- [AWS](#) - Amazon EC2
- [Azure](#) - Microsoft Azure
- [Vsphere](#) - VMWare VSphere
- [Rackspace](#) - Rackspace
- [Eldarion Cloud](#)
- [StackPoint Cloud](#)

Case Studies

Study of Various different case studies

- [Building a Bank with Kubernetes](#)
- [Bringing Pokemon Go to Google Cloud](#)
- [Monitoring Kubernetes at Wayblazer](#)

Persistent Volume Providers

List of some Persistent Volume Providers for Kubernetes. Check out [Kubernets Experimental](#) for more info

- [GCE](#)
- [AWS](#)
- [\[vSphere\]](#)
- [\[Glusterfs\]](#)
- [\[OpenStack Cinder\]](#)
- [\[CephRBD\]](#)
- [\[QuoByte\]](#)

Related Projects

Kubernetes-related projects that you might find helpful

Related Software

Projects built to make life with Kubernetes even better, more powerful, more scalable

- [Hypernetes](#)
- [Helm Package Manager](#)
- [Ubernetes](#)
- [Minikube](#)
- [kmachine](#)
- [spread](#)
- [Supergiant](#)
- [Kubefuse](#)
- [\[KubeSpray\]\[<https://github.com/kubespray>\]](#)
- [Bootkube](#)
- [Localkube](#)
- [Kubernetes Ec2 Autoscaler](#)

- [Kubeform](#)
- [k8comp](#)
- [kube-openvpn](#)
- [Client Libraries](#)

Package Managers

- [Helm](#)
- [KPM](#)

Monitoring Services

To maintain regular surveillance over kubernetes

- [Console](#)
- [Datadog](#)
- [Heapster](#)
- [Kubedash](#)
- [Kube-ui](#)
- [Prometheus](#)
- [Sysdig Open Source](#)
- [Sysdig Monitoring](#)
- [Weave Scope](#)

PaaS Providers

Kubernetes Platform as a Service providers

- [OpenShift](#)
- [Deis Workflow](#)
- [\[Gondor/Kel\]](#)
- [WSO2](#)
- [Rancher](#)
- [Kumoru](#)

Continuous Delivery

Build-test-deploy automated workflow software designed to make production environments more stable and life better for engineers

- [Fabric8](#)
- [Jenkins](#)
 - [Jenkins-Kubernetes Plugin](#) by [Carlos Sanchez](#)
 - [Automated Image Builds with Jenkins, Packer, and Kubernetes](#)
 - [On-demand Jenkins slaves with Kubernetes and the Google Container Engine](#)
 - [Jenkins setups for Kubernetes and Docker Workflow](#)
- [kb8or](#)
- [Wercker](#)
- [Shippable](#)
- [GitLab](#)
- [Cloudmunch](#)
- [Kontinuous](#)
- [Kit](#)
- [Spinnaker](#)

Serverless Implementations

- [Funktion](#)
- [Fission](#)
- [Kubeless](#)
- [OpenWhisk](#)
- [Iron.io](#)

Container Support

A list of linux containers supported by kubernetes.

- [Docker](#):
- [Rkt](#)
 - [Rktnetes](#)
- [\[containerd\]](#)
- [\[CRI-O \(OCI\)\]](#)
- [\[Hyper.sh/frakti\]](#)

Database/NoSQL

- [CockroachDB](#)
- [Cassandra / DataStax](#)
- [MongoDB](#)
- [Hazelcast](#)
- [Crate](#)
- [Vitess](#)
- [Minio](#)

Networking

- [\[WeaveWorks\]](#)
- [Canal by Tigera](#)
- [OpenContrail](#)
- [Nuage](#)
- [Kuryr](#)
- [Contiv](#)

Service mesh

- [Envoy](#)
- [Linkerd](#)
- [Amalgam8](#)
- [WeaveWorks](#)

RPC

- [Grpc](#)
- [Micro](#)

Secret generation and management

- [Vault controller](#)
- [kube-lego](#)
- [k8sec](#)

Mobile applications

- [Cabin](#)
- [Cockpit](#)

API/CLI adaptors

- [Kubebot](#)
- [StackStorm](#)
- [Kubefuse](#)
- [Ksql](#)
- [kubectld](#)

Application deployment orchestration

- [ElasticKube](#)
- [AppController](#)
- [Broadway](#)
- [Kb8or](#)
- [IBM UrbanCode](#)
- [Nulecule](#)
- [Deployment manager](#)

Configuration

- [\[Kompose\]](#)
- [\[Jsonnet\]](#)
- [Spread](#)
- [K8comp](#)
- [Ktmpl](#)
- [Konfd](#)
- [kenv](#)
- [kubediff](#)
- [Habitat](#)
- [Puppet](#)
- [Ansible](#)

Security

- [Tirame](#)
- [Aquasec](#)
- [Twistlock](#)

Managed Kubernetes

- [Platform9](#)
- [Gravitational](#)
- [KCluster](#)

Load balancing

- [Nginx Plus](#)
- [Traefik](#)

Developer platform

- [Fabric8](#)
 - [Spring Cloud integration](#)
- [goPaddle](#)
- [VAMP](#)

Raspberry Pi

Some of the awesome findings and experiments on using Kubernetes with Raspberry Pi. Checkout [Kubecloud](#)

- [Setting up a Kubernetes on ARM cluster](#)
- [Local registry in Kubernetes on ARM](#)

Books

A written or printed work consisting of pages glued or sewn together along one side and bound in covers that provide us with information

- [Kubernetes: Up and Running](#) by [Kelsey Hightower](#)
- [Docker and Kubernetes Under the Hood](#) (Chinese) by [Harry Zhang](#), Jianbo Sun and

ZJU SEL lab

- [Kubernetes: Scheduling the Future at Cloud Scale](#) by Dave K. Rensin
- [Kubernetes in Action](#) by Marko Lukša
- [Kubernetes Cookbook](#) by Hideto Saito, Hui-Chuan Chloe Lee, Ke-Jou Carol Hsu
- [Getting Started with Kubernetes](#) by Jonathan Baier

Slide Presentations

A slide is a single page of a presentation created with software such as PowerPoint or OpenOffice Impress.

- [Architecture Overview](#) by enakai00
- [Package your Java EE Application using Docker and Kubernetes](#) by Arun Gupta
- [Scaling Jenkins with Docker and Kubernetes](#) by Carlos Sanchez
- [An Introduction to Kubernetes](#) by Imesh Gunaratne
- [Musings on Mesos: Docker, Kubernetes, and Beyond.](#) by Timothy St. Clair
- [Cluster management with Kubernetes](#) by Satnam Singh
- [A brief study on Kubernetes and its components](#) by Ramit Surana
- [Moving to Kubernetes - Tales from SoundCloud](#) by Tobias Schmidt
- [Kubernetes Scaling SIG \(K8Scale\)](#) by Bob Wise
- [Network oriented Kubernetes intro](#) by Salv Orlando
- [Zero downtime-java-deployments-with-docker-and-kubernetes](#) by Arjan Schaaf
- [Kubernetes and CoreOS @ Athens Docker meetup](#) by Mist.io
- [Achieving CI/CD with Kubernetes](#) by Ramit Surana

Videos

A recording of moving visual images made digitally or on videotape.

Main Account

- [Google Developers](#)
- [Kubernetes](#)

Other Useful Videos

- [Google I/O 2014 - Containerizing the Cloud with Docker on Google Cloud Platform](#) by Google Developers
- [Container Orchestration using CoreOS and Kubernetes](#) by Kelsey Hightower

- [A Technical Overview of Kubernetes](#) by Bredan Burns
- [Docker Containers and Kubernetes with Brian Dorsey](#) by Brian Dorsey
- [Alpaca Kubernetes on AWS](#) by Adrien Lemaire
- [Arun Gupta: Package your Java applications using Docker and Kubernetes](#) by Arun Gupta
- ["Managing Containers at Scale with CoreOS and Kubernetes"](#) by Kelsey Hightower by Kelsey Hightower
- [Kubernetes: The Journey So Far - Greg DeMichillie](#) by Greg DeMichillie
- [DevNation 2015 - Paul Bakker - Kubernetes: Beyond the basics](#) by Paul Bakker

Interactive Learning Environments

Learn Kubernetes using an interactive environment without requiring downloads or configuration

- [Katacoda](#)
- [Kubernetes Bootcamp](#)

Interesting Twitter Accounts

Twitter is quick, it's easy to communicate on, and is a very valuable social channel for a brand or business if you use it to its full potential, By following these news aggregators, rolling news channels, and companies, you can get the inside scoop of a story long before it hits the mainstream news outlets.

- [Kubernetes](#)
- [Google Cloud Platform](#)
- [Kube Con](#)
- [Kismatic](#)
- [Engine Yard](#)
- [Apcera](#)
- [CoreOS](#)
- [DevOps Summit](#)
- [KubeWeekly](#)
- [KubeFacts](#)
- [Skippbox](#)

Amazing People

- [Bredan Burns](#), Partner Architect at Microsoft
- [Kelsey Hightower](#), Staff Developer Advocate at Google
- [Arun Gupta](#), Vice President, Developer Relations at Couchbase
- [Carlos Sanchez](#), Senior Software Engineer, CloudBees
- [Joseph Jacks](#), Senior Director, Product Management: Kubernetes Platform Engineering at Apprenda
- [Joe Beda](#), Co-founder and Technical Lead for Kubernetes
- [Patrick Reilly](#), CEO at Kismatic, Inc. / Advisor at Mesosphere, Inc
- [Brandon Philips](#), CTO at CoreOS
- [Eric Tune](#), Senior Staff Engineer at Google
- [Tim Hockin](#), Senior Staff SW Engineer / Engineering Manager at Google

Meetup Groups

An awesome way to connect with kubernauts around the globe

- [Berlin](#)
- [New York](#)
- [Paris](#)
- [San Fransico](#)

Connecting with Kubernetes

- [Freenode](#)
- [Twitter](#)
- [Google +](#)
- [Stackoverflow](#)
- [Slack](#)
- [Mailing List](#)
- [Newsletter](#) by [Kismatic](#)
- [Reddit](#)
- [Community](#)

Conferences

Some must to go and attend conferences on kubernetes

- [Kubecon](#)

- [Container Camp](#)
- [GCP Next](#)
- [Docker Con](#)
- [Devoxx](#)

Contributing

Contributions are most welcome!

This list is just getting started, please contribute to make it super awesome.

Check out the [Contributing Guidelines](#).

License



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