



# ONAP/K8S Deployment

Borislav Glozman (OOM Team)

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# Agenda

- Read-The-Docs
- HW Requirements
- Describe deployment process
- Demo

# Setup Kubernetes with Rancher - Read-The-Docs

A step-by-step explanation on how to deploy Rancher Kubernetes:

[Setup Kubernetes with Rancher](#)

# OOM - Deploy ONAP on Kubernetes - Read-The-Docs

A step-by-step explanation on how to deploy ONAP on Kubernetes:

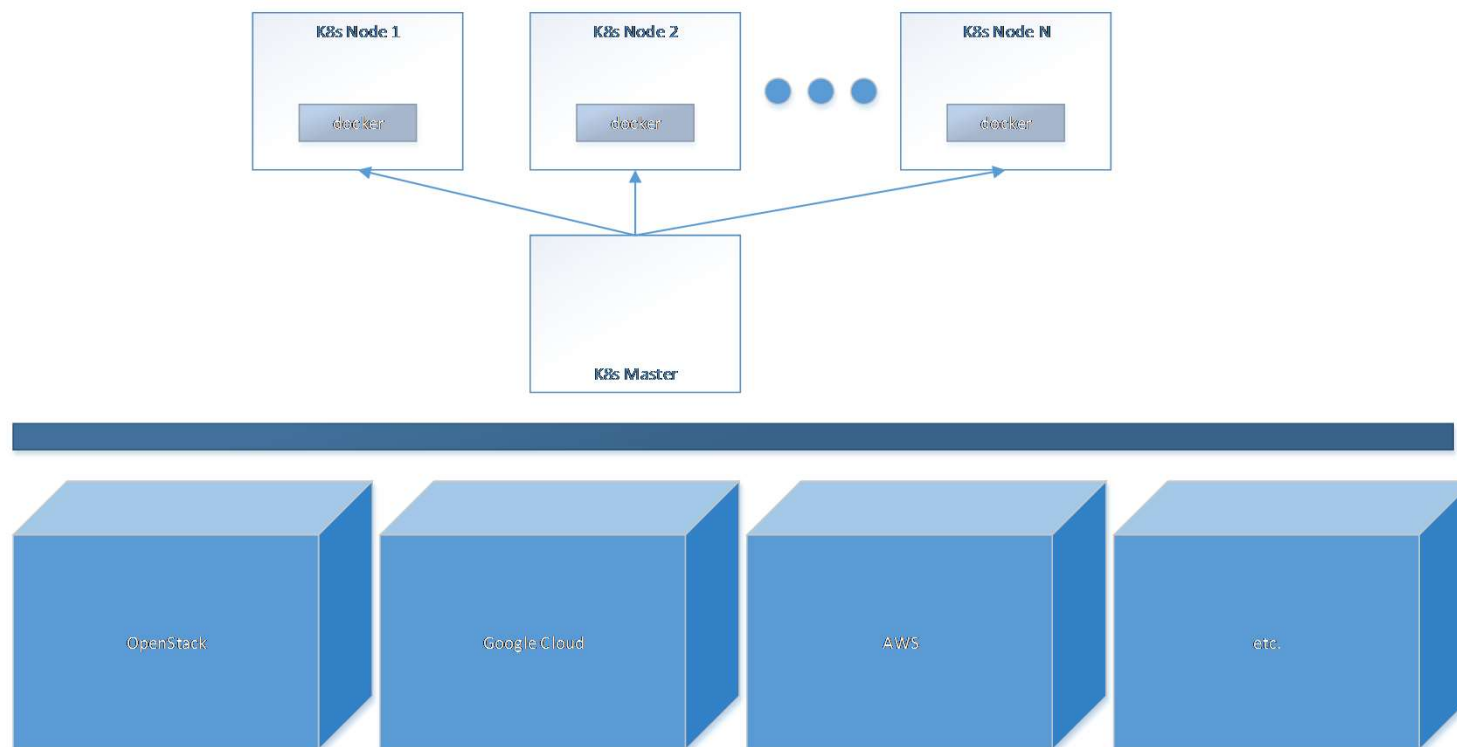
[Deploy ONAP on Kubernetes](#)

## HW Requirements

- Master/Rancher: 4 CPU, 8Gb RAM, 80Gb Disk
- 5 k8s nodes: 8 CPU, 32Gb RAM, 100Gb Disk
- ... Or other variations, with at least 144 Gb RAM total.

# Kubernetes (k8s)

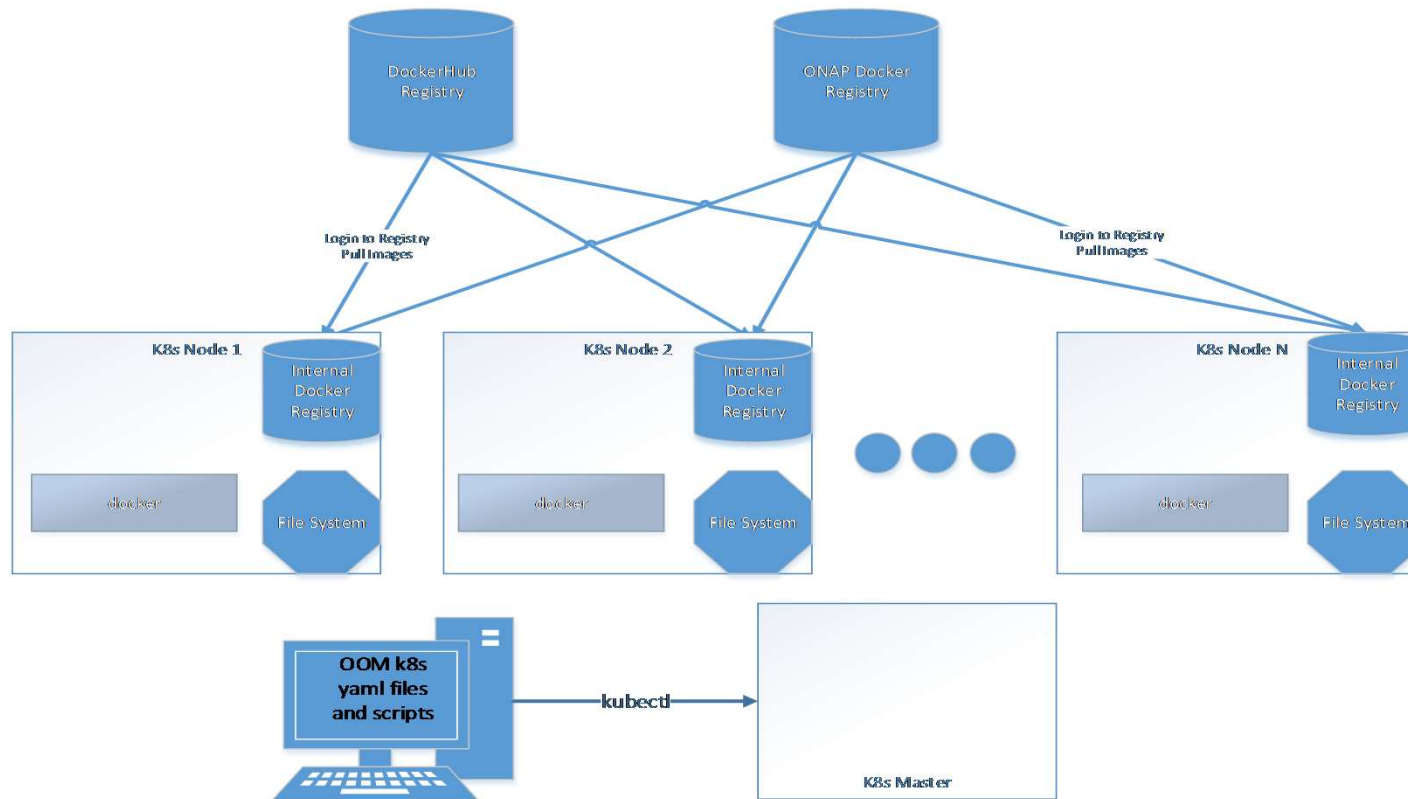
Basic Kubernetes deployment



For k8s info: <http://k8s.io>

# Deployment Process - Preparation

Create /dockerdata-nfs nfs mounted directory on each node. This location will later be mapped to containers.



# Deployment Process - make

- Run 'helm serve' in background – local helm repo
- git clone oom
- Run 'make all' in oom/kubernetes directory

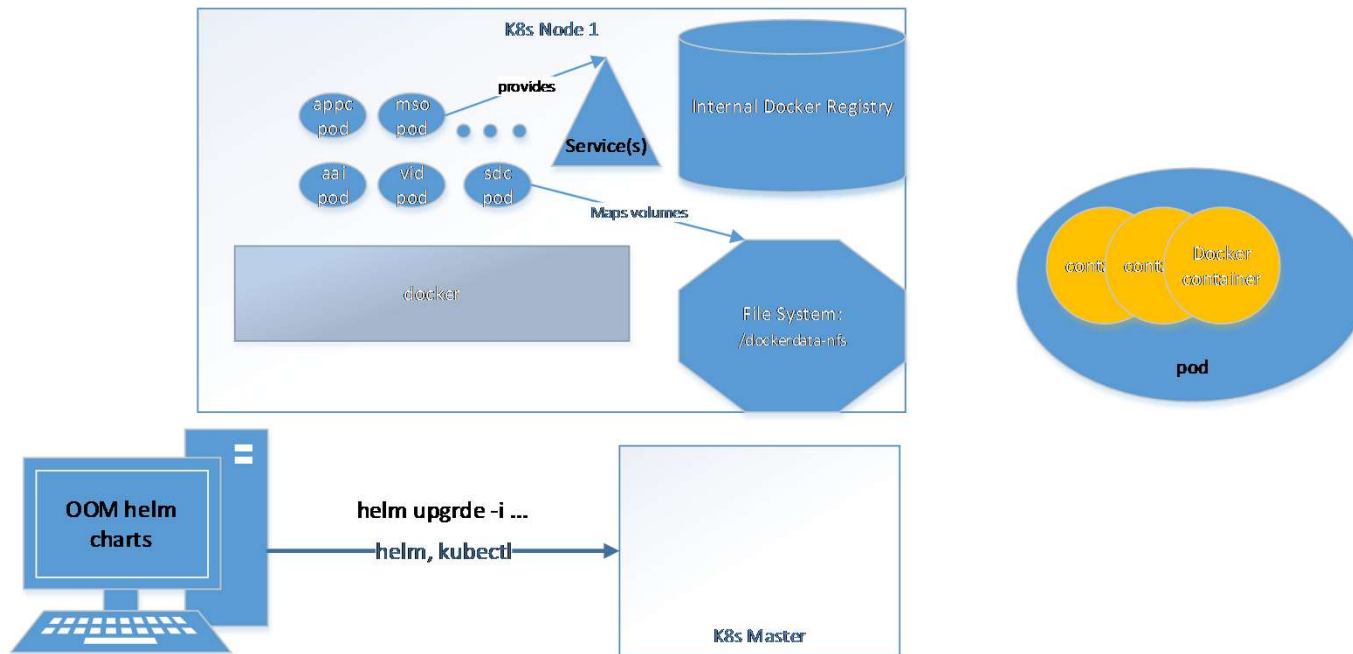


# Deployment Process - deploy

Deploy all components.

Command: `helm upgrade -i demo local/onap --namespace onap --set global.pullPolicy=IfNotPresent -f ...`

There is an order in which pods should start. This order is achieved by readiness container that runs as part of pods deployment and ensures that relevant dependencies (other containers) are met.



# Deployment Process – Access portal

- Find the IP address of portal LoadBalancer:
  - `kubectl get svc --all-namespaces | grep portal-app`
  - Use the EXTERNAL-IP.
  - If this IP is not accessible from outside of the cluster, assign it a floating IP.
- Update /etc/hosts with:
  - 10.12.6.155 portal.api.simpdemo.onap.org
  - 10.12.6.155 vid.api.simpdemo.onap.org
  - 10.12.6.155 sdc.api.fe.simpdemo.onap.org
  - 10.12.6.155 portal-sdk.simpdemo.onap.org
  - 10.12.6.155 policy.api.simpdemo.onap.org
  - 10.12.6.155 aai.api.sparky.simpdemo.onap.org
  - 10.12.6.155 cli.api.simpdemo.onap.org
  - 10.12.6.155 msb.api.discovery.simpdemo.onap.org
- Access <http://portal.api.simpdemo.onap.org:8989/ONAPPORAL/login.htm>

# Deployment Process – Access portal

The screenshot displays the ONAP Portal interface. At the top, the browser address bar shows the URL: `portal.api.simpledemo.onap.org:8989/ONAPPORAL/applicationsHome`. The portal header includes the ONAP logo, navigation links for "Portal", "Manage", and "Support", and a user profile icon labeled "Demo".

The main content area is divided into two primary sections:

- Applications:** This section features a "Sort by:" dropdown menu and a grid of application tiles. The tiles include:
  - A&AI UI:** A tile showing a network diagram.
  - CLI:** A tile with a terminal icon and a hexagonal logo.
  - Policy:** A tile displaying a complex flowchart with nodes like "Policy", "Configuration", and "Validation".
  - SDC:** A tile with the SDC logo.
  - Virtual Infras...:** A tile showing a network diagram.
  - Demo App:** A tile with the ECOMP logo.
- Widgets:** This section contains three widget panels:
  - Events:** A list of events, including "12/11/17 ONAP Beijing Release Developer Forum" and "03/26/18 Open Networking Summit".
  - Resources:** A list of links for "Development Guides", "ONAP Wiki", "ONAP Portal Documentation", and "ONAP Architecture".
  - Portal-Common-Scheduler:** An empty panel with a header and a menu icon.

On the left side, a navigation menu lists various options: Home, Application Catalog, Widget Catalog, Admins, Roles, Users, Portal Admins, Application Onboarding, Widget Onboarding, Edit Functional Menu, User Notifications, Microservice Onboarding, and App Account Management.

On the right side, there is a vertical sidebar with "Online Users" (showing a profile for "demo") and a blue navigation button with a right-pointing arrow.



**ONAP**

OPEN NETWORK AUTOMATION PLATFORM

Thank you