

SUSE CaasP automatic (semi) deployments on Openstack

SUSECon19

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Welcome!



About Us



Who we are:

- Cloud professionals each passionate about tech
- Excited about new things and extremely good at helping customers learn and embrace new tech
- We work on things like Openstack, Ceph , Kubernetes, Nextcloud etc. (see the nice pictures in the footer??) and make them work for normal companies.
- We work on one of the worlds largest Openstack deployments and own our own cloud
- We have a lot of fun while working extreme hours to make the customers happy



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SUSE



ceph



openstack.

Our Services

What we do (Consulting)

- Openstack Consulting: (Development and Deployment of one of the largest Openstack cluster)
- Ceph Consulting: (Multiple SES / Ceph deployments and designs for government and private)
- Kubernetes Consulting: CaasP and CAP deployment consulting
- Linux Consulting: Anything Linux , HA and assorted additions



What we do (Service)

- Openstack hosting and deployment
- Ceph (S3) hosting and deployment
- Kubernetes hosting and deployment
- Advanced (and a little extreme) Log Management hosted and quick deployment
- Cloud Vendor Management platform (invoicing and management)



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nextcloud kubernetes SUSE ceph openstack.

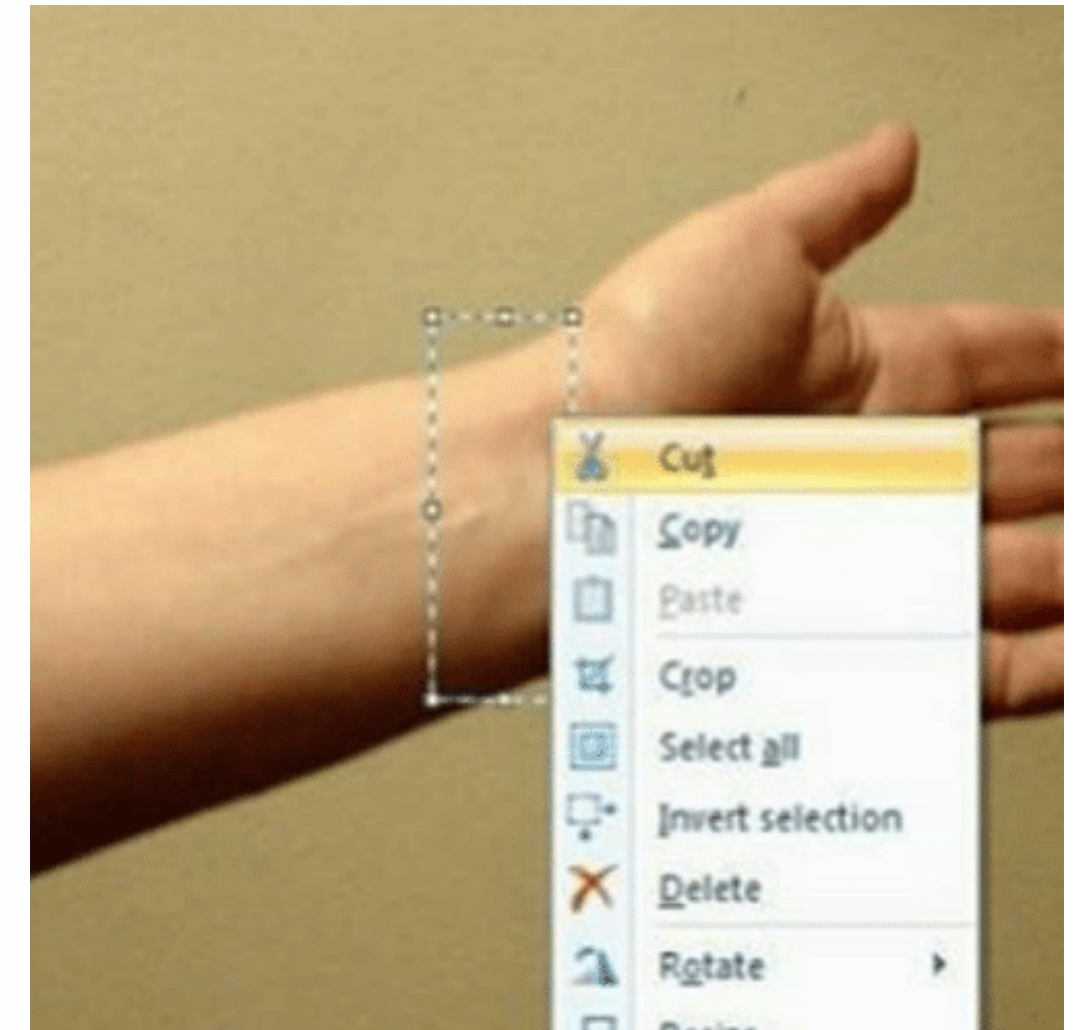
How the next half hour will change your life!

- It probably won't (but it got your attention)
- You will see a real example of how SUSE CaaS can be deployed in a mostly automated way
- You will see this in a real Openstack production Cloud
- You will be dazzled by how easily a CaaS environment can be deployed to that it is working.
- You will be able to verify yourself that the demo sites work by accessing the public IP..... for a while



Why SUSE CaaS?

- Kubernetes clustered Container Tech
- Built on SUSE's stability track record
- Relative ease of deployment and integrate
- Fully compatible to host on Openstack Cloud or physical machines



Stop!... Demo time!

What we will do:

- We will build a complete 4 node CaaS Cluster inside Openstack Cloud
- We will then configure this cluster to be Cloud Provider Integrated
- While this is installing, we will look at how to deploy Wordpress inside CaaS, and publishing it to the big bad world
- When the cluster is done installing, we will do the exact same thing (just quicker) in the new cluster
- Either it all works perfectly, or it all goes up in flames.... Either way we will have some beer afterwards



Step1: Launching the cluster build up



- In order to automate a lot, we use a Heat Template for Openstack
- Select and fill in the form and click on “MAGIC!” (slow magic but magic)



Step 2: Wait

- While we wait, we will go through the parts that are needed and how it works...
- This should take approximately 15 -20 minutes, including all additional setup steps.



Step 2.01: Use cluster



- Built up cluster is accessed from the outside world, let's keep it real
- To show full compatibility we will NOT be using a SUSE Linux machine to do the work with CaaS
- Why make things easy when you can make them difficult?



Step 3: Configure cluster with CPI (Cloud Provider Integration)

Nothing fancy, just a few UUIDs, usernames, and your credit card needed!



Step 4: Log into the Cluster and...

Get the kubeconfig file to work with.

This is already configured neatly to point to the correct IPs / FQDN
and authentication



Step 5: Deploy the parts of Wordpress that are needed

Wordpress yaml

Mysql / mariadb yaml

Services Yaml

Persistent Volumes yaml



Step 6: To complete the fun, delete it ALL

Tap tap, click click.... GONE!



Thank you for watching the show, questions?



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