

# CSC Pouta Clouds in 5 minutes do those with OpenStack history



*CSC – Finnish research, education, culture and public administration ICT knowledge center*

# CSC Pouta clouds

- Two installations cPouta and ePouta
  - Both run CentOS 7 w/ RDO Queens now
- cPouta - Community cloud
  - Launched in production April 2014
  - In Kajaani (middle of Finland)
- ePouta – Virtual private cloud
  - Launched in production spring 2015
  - In Espoo (it's basically Helsinki)
  - VMs/resources only exposed via L2/L3 VPN/OPN to customer sites, not the internet
  - Used a lot for bioinformatics



Horizon



Nova



Keystone



Neutron



Cinder



Glance



Heat



Barbican



RGW  
Object store



Galera



Rally + Tempest



RBD block  
storage



HAPROXY



Reppu  
Accounting DB



# Architecture

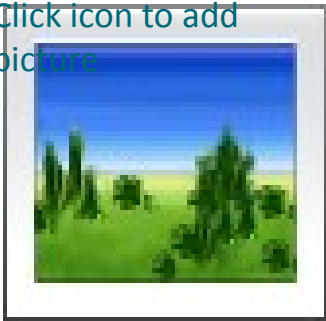
- Still monolithic API nodes
  - Plans on improving this
  - Podmanned services?
- Dev/Test/Prod on both systems
- VLAN + VXLAN + linuxbridges for networking
- Most things virtualized incl. Net nodes
- 1 availability zone, region and cell per service
- ~300 compute nodes per service (incl. GPU nodes)

# Processes

- Team (5 + PO) takes care of everything from HW orders to customer tickets (not Ceph though)
- Big focus on constantly improving our processes
- Decisions consider the long term
- Don't disrupt the customer
  - We still probably have volumes from 2014
- We're used as a production infra for a lot of our and customer services



Click icon to add  
picture



<https://www.facebook.com/CSCfi>



<https://twitter.com/CSCfi>



<https://www.youtube.com/c/CSCfi>



<https://www.linkedin.com/company/csc---it-center-for-science>