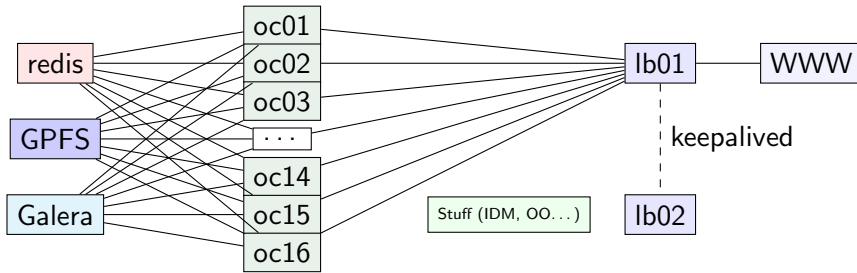sciebo ng

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Sciebo Site Report

- ▶ started in 2015 for NRW
- ▶ serving over 30 academic institutions
- ▶ 190k registered users (including recently expired accounts, 6 month time limit)
- ▶ more than 130k users active during the last three months
- ▶ 2 PB of data including snapshots (30 days)
- ▶ 4000 project boxes (group accounts)

Architecture sciebo (old hardware)

Three sites (Bonn, Duisburg-Essen, Münster), each:

Each ownCloud server hosts about 10 instances via name based virtual hosting in apache
(uni-bonn.sciebo.de, uni-muenster.sciebo.de ...)

Pluses and minuses of old architecture

- ⊕ robust and easy to understand
- ⊕ easily managagable with SSH and ansible
- ⊖ easier managed with SSH and not ansible anymore
- ⊖ one huge Galera cluster per site
- ⊕ good monitoring of health with Check_MK
- ⊖ low visibility of performance, latencies and other live metrics
- ⊕ log management? pdsh grep
- ⊖ additional services introduce heterogeneity and are quickly out of sight
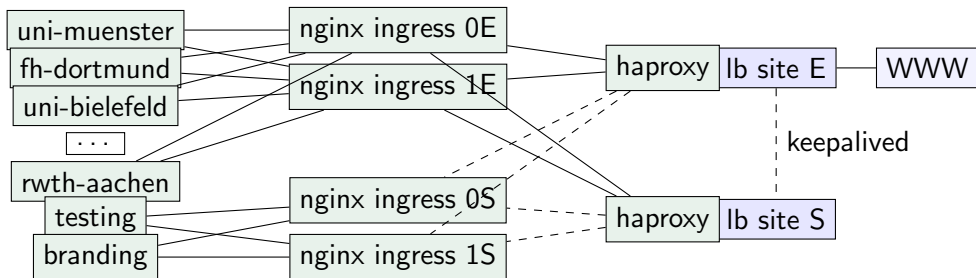
Architecture sciebo (new hardware, WIP)

Two sites E(insteinsstrasse) and S(chlossplatz) in Münster with GPFS spanning both
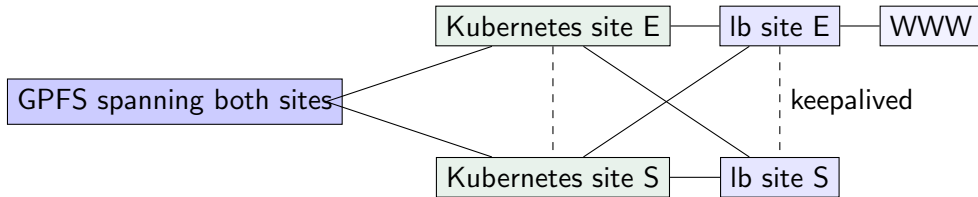
Kubernetes ingress setup

Usually there is little focus on this as most people just rent their cloud.

Kubernetes pluses and minuses

- $\oplus$ You can't just SSH into apaches and break things permamently
- $\oplus$ It is designed with declarative deployments in mind and plays well along with git
- $\oplus$ Prometheus Operator + Loki $\heartsuit$
- $\ominus$ helm, git, kubectl, git-crypt, buildah . . . learning requires effort
- $\ominus$ as more things run clustered (Galera, ceph, . . .) networking becomes more important
- $\ominus$ More contrapoints . . . coming CS3 2022 ;-)