Moving the sciebo Sync and Share Cloud Service to State of the Art Cloud Technology

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> Sciebo

- Sync and share service for higher education in NRW
- Product name sciebo derived from “science box”
- 500,000 potential users in NRW
- University of Muenster acts as vendor

www.hochschulcloud.nrw
Reasons for using sciebo

- Keep data synchronous between different computers
- Exchange data with colleagues and externals (synchronous and larger files than in mail attachments)
- Access your data from your smartphone
- Lots of storage
- Data privacy
Left: First project phase. Right: Second project phase

Source: Bundesamt für Kartographie und Geodäsie, Frankfurt am Main 2010
Setup

- Two synchronously mirrored sites
- Spectrum Scale
- Independent Kubernetes clusters
- 100 GBit Ethernet for coupling
- Infiniband for fast storage access
- Currently ownCloud 10, will be migrated to OCIS
Network Setup
Storage

- Kubernetes host
- CephFS (database, applications)
- Spectrum Scale (user data)
> Reasons for using Kubernetes

- Higher availability
- Makes high number of instances more manageable
- Easier upgrades
- Better platform for multiple services
- (Almost) no performance drawback (other than virtualization)
- If done correctly, more intrinsic documentation
Thank you for your attention!