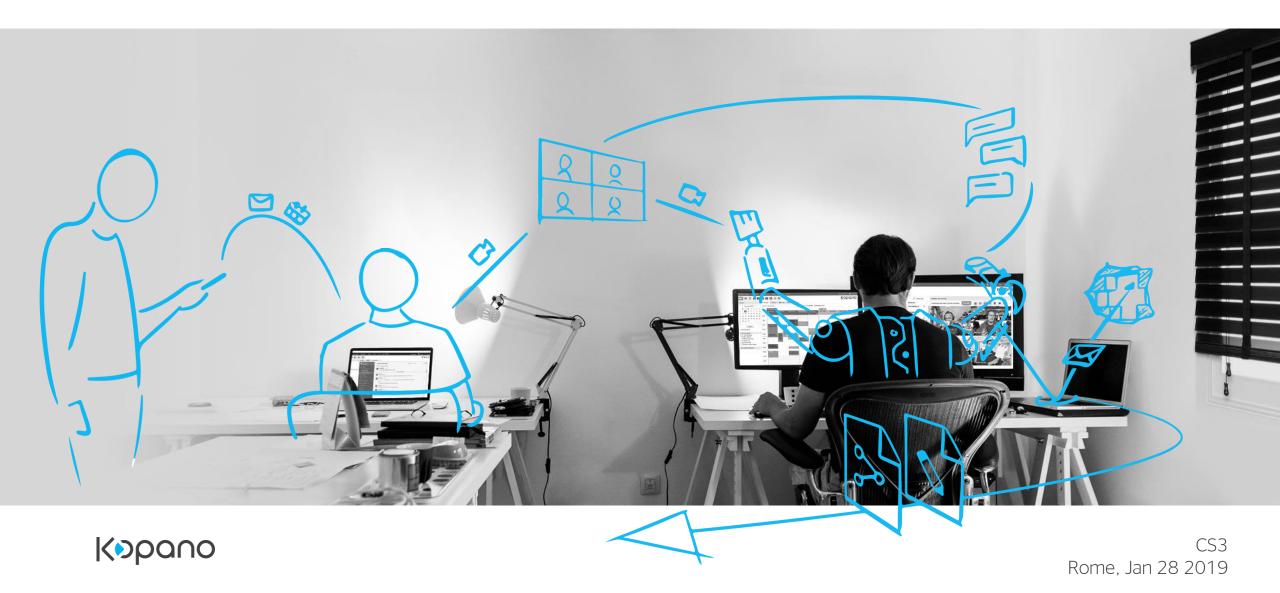
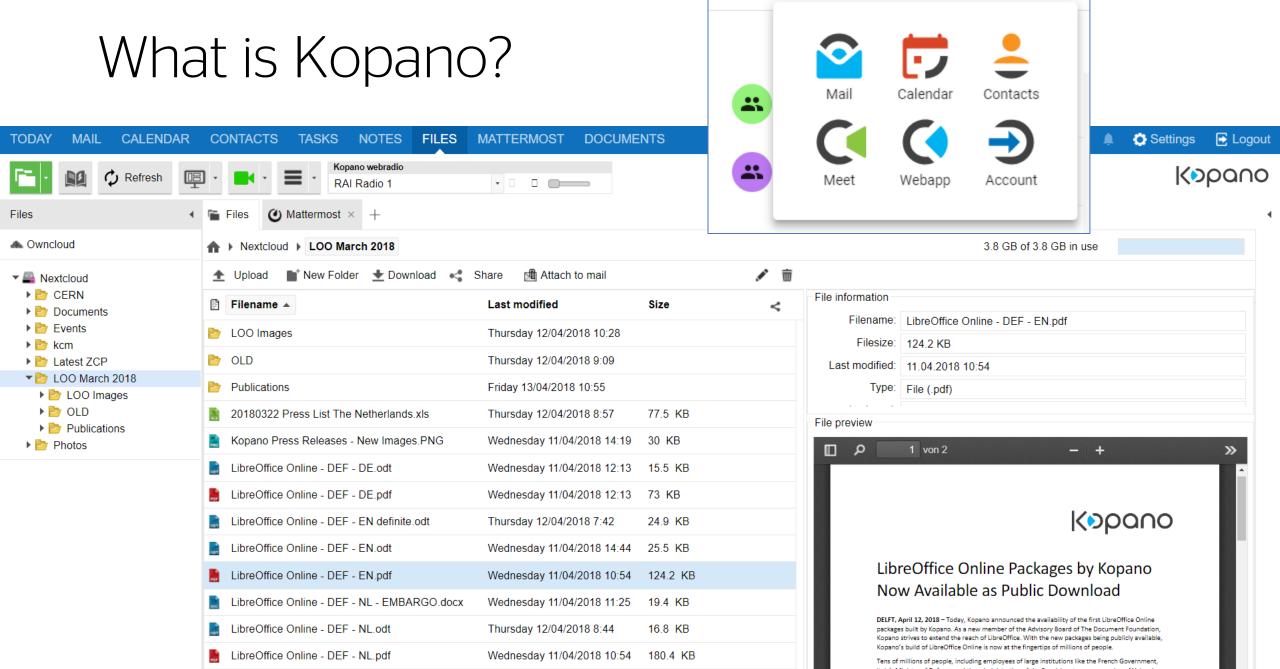
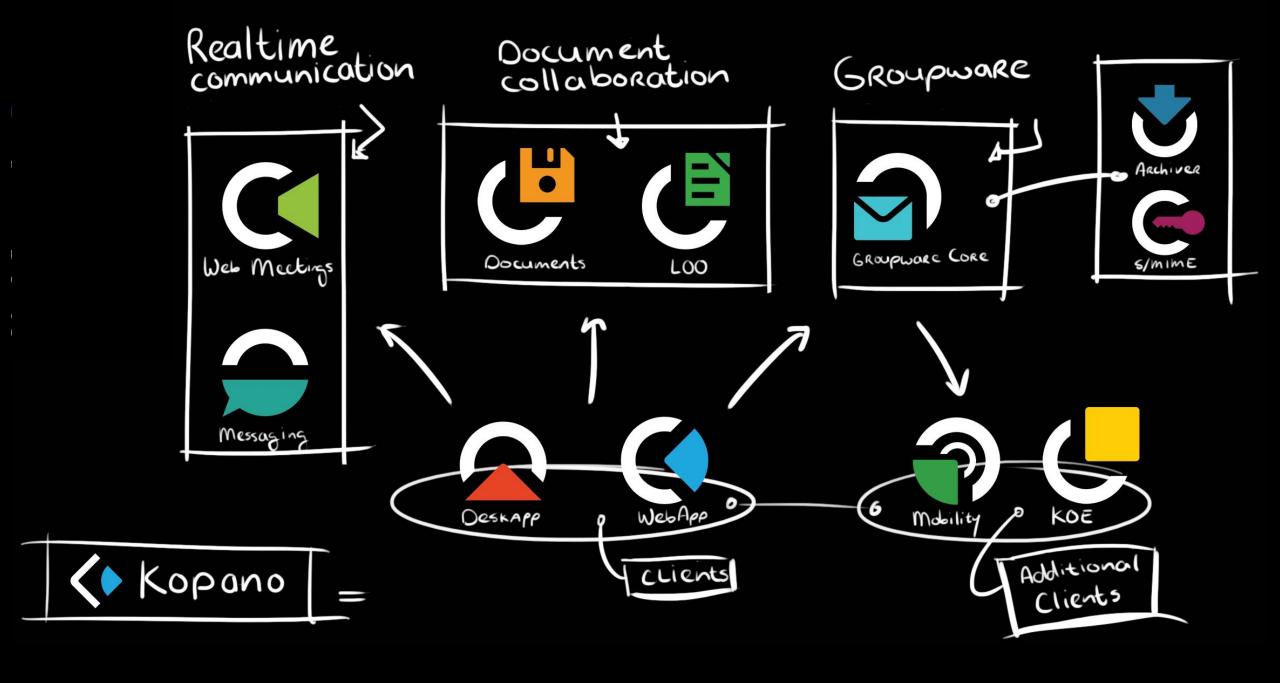
# Kopano and Ceph (and more...)



# imogine a Post- Outlook Era?

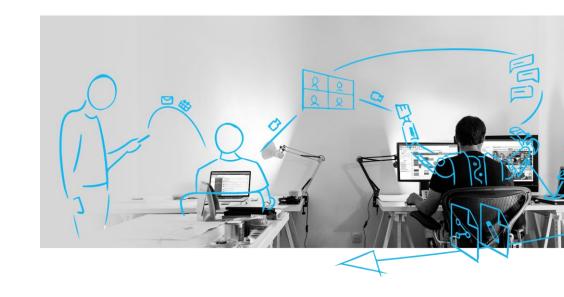






# What is Kopano?

- Worldwide leading open source MAPI-based groupware
- E-Mail, Calendar, Contacts, Tasks, Notes
- Meetings, Documents
- Clients: Windows, MacOS, Linux, Android, iOS, Chrome, Firefox, Edge, ... and more.
- Feature rich and stable
- Used by Governments, Industry, Science and much more.
- Solid, scalable, high available on premise communication solution





macOS







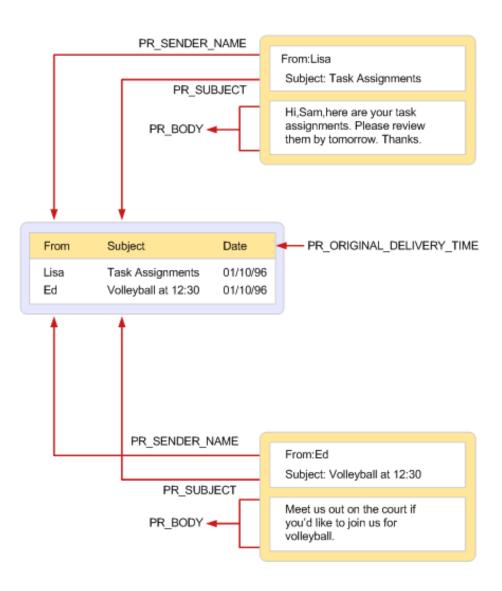






#### MAPI?

- Messaging Application Programming Interface
- Invented by Microsoft
- MAPI is not just an API, it includes an object storage model
- Lossless storage of object information
- Think of the MAPI storage model like a multi-dimensional keyvalue chain containing so-called MAPI Tables
- Each object consists of multiple MAPI-Attributes describing the object
- Object-Types are distinguished by only a single attribute
- Well standardized and documented and the foundation of Microsofts' success in the messaging ecosystem.



# What makes us special

A complete communication platform under your control

MAPI-based

Scalable

Open

- MAPI & Exchange ActiveSync
- Open, standardized REST Interface
- # 1 Non-Java OpenID Connect Provider

	Groupware	on low TCO	Source
Zimbra		•	•
Kolab	$\bigcirc$	•	•
Open-Xchange	$\bigcirc$	•	•
Kopano	•	•	•

Your data, Your terms, Your complete working space



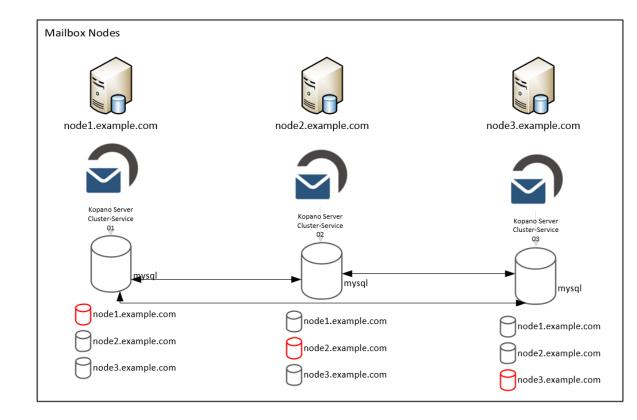
- Groupware, online communication, file sharing, online editing
- Platform independent (Windows, macOS, Linux, Android, iOS)
- · Open source, self-hosted, private cloud





#### Backend Architecture

- Group replication based on MySQL
- Scalability by Kopano Multi-Server technology
- Kopano components communicate HTTPS





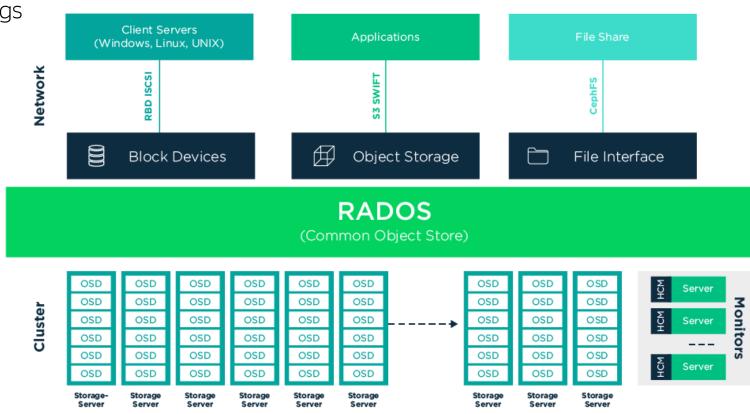
#### What is CEPH?

- Outscaling storage solution
- Serves multiple storage types (Block storage, Object Storage)
- Near-linear scalability

 "One storage to rule them all": Kopano Groupware Core, Kopano Documents, Kopano Meetings

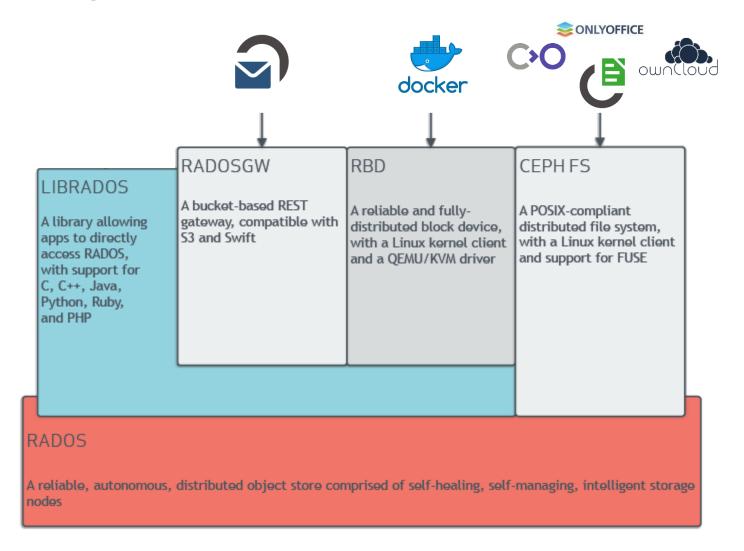
What is SUSE Enterprise Storage?

CEPH on steroids



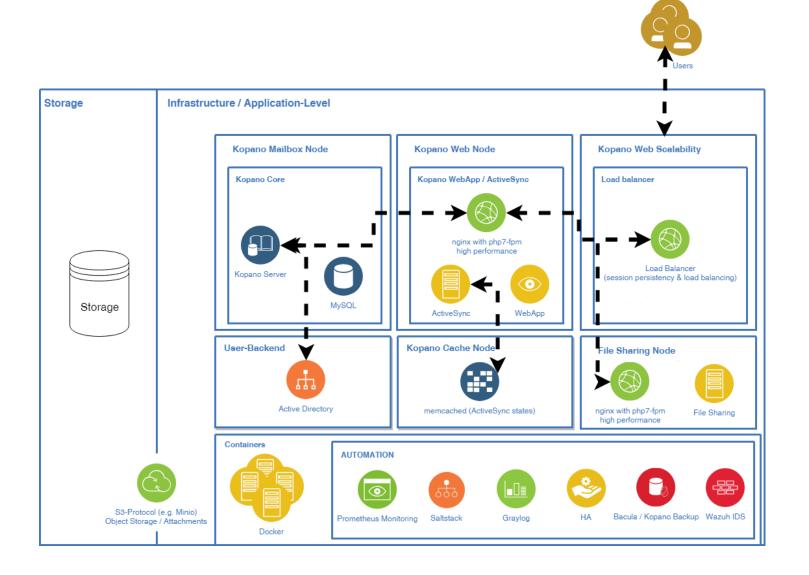


# One storage architecture for your precious data



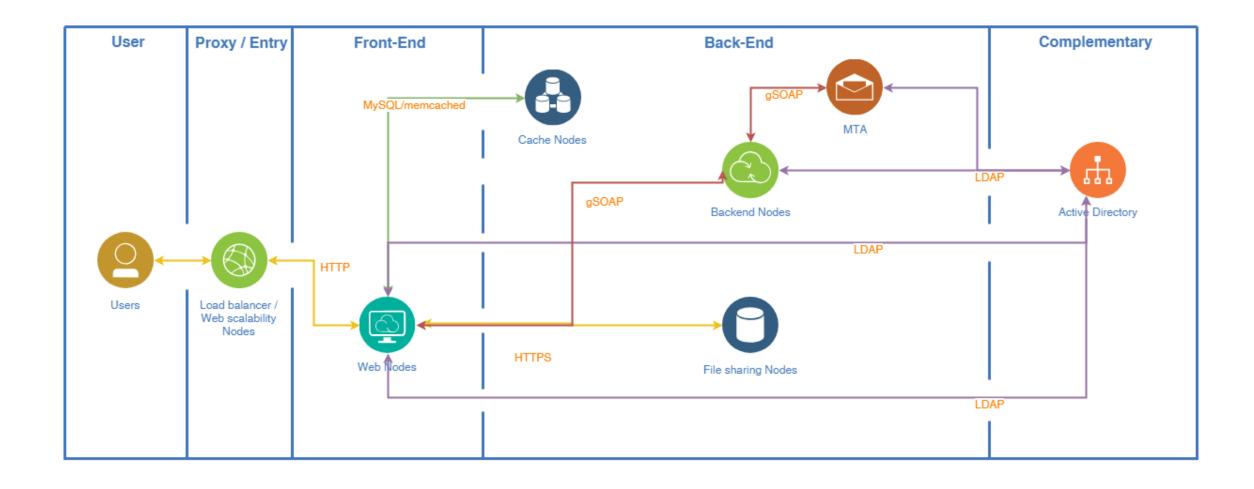


### Component architecture with >100.000 users





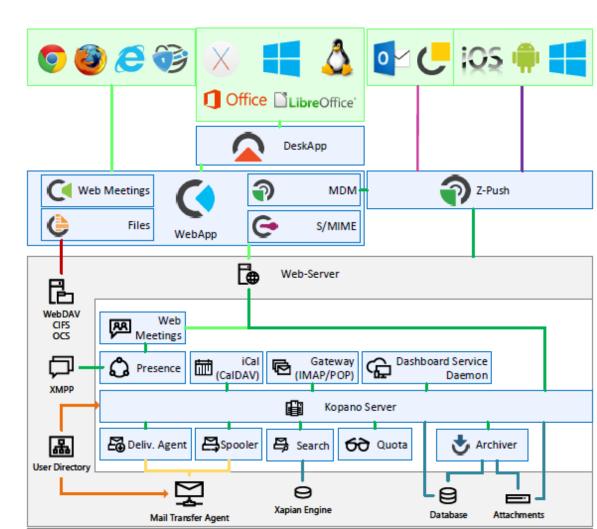
#### Protocol architecture with >100.000 users





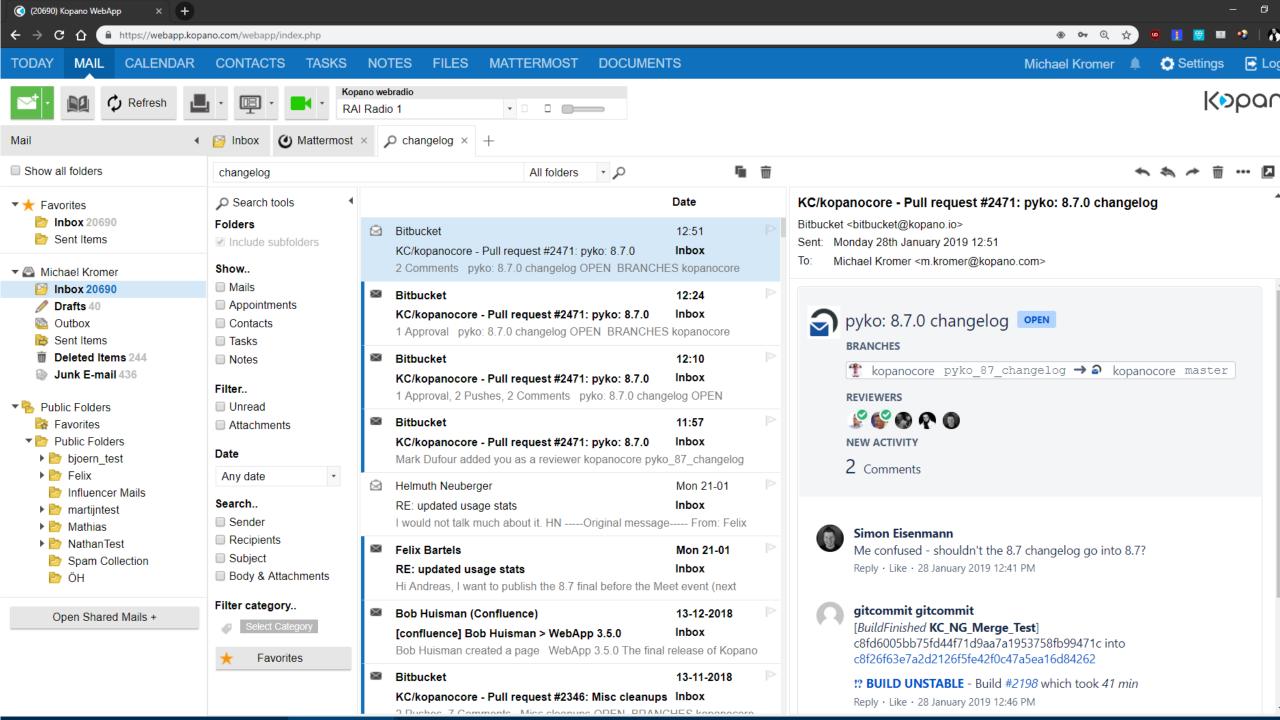
# Architecture to deliver rich communication and file sync & share experience

- Modularity allows scalability to a cloud-level
- Primary communication services all web based
- REST interface based on Graph API
- Authentication based on OpenID Connect



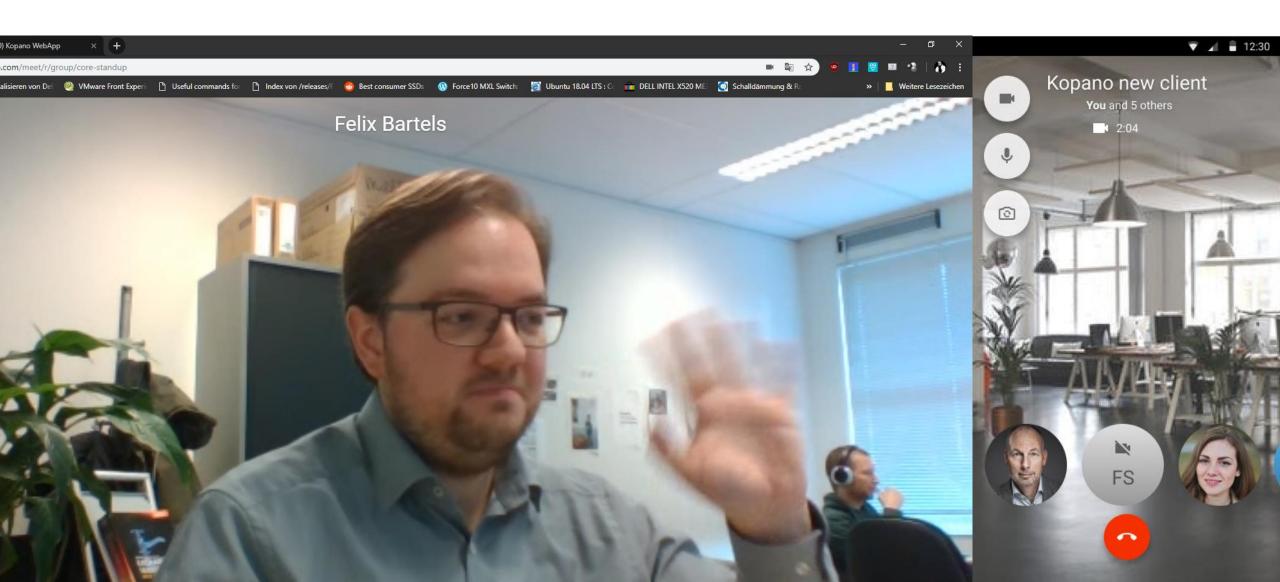


The result





# What is the result?



Thank you!

Q & A

Demo: In the Demo-Room

