Datacenter IaaS workshop
11./12. Sep. 2014 Helsiki

File Sync and Share
Cloud services in education and research

powered by

12 SEP 2014

Roadmap for today

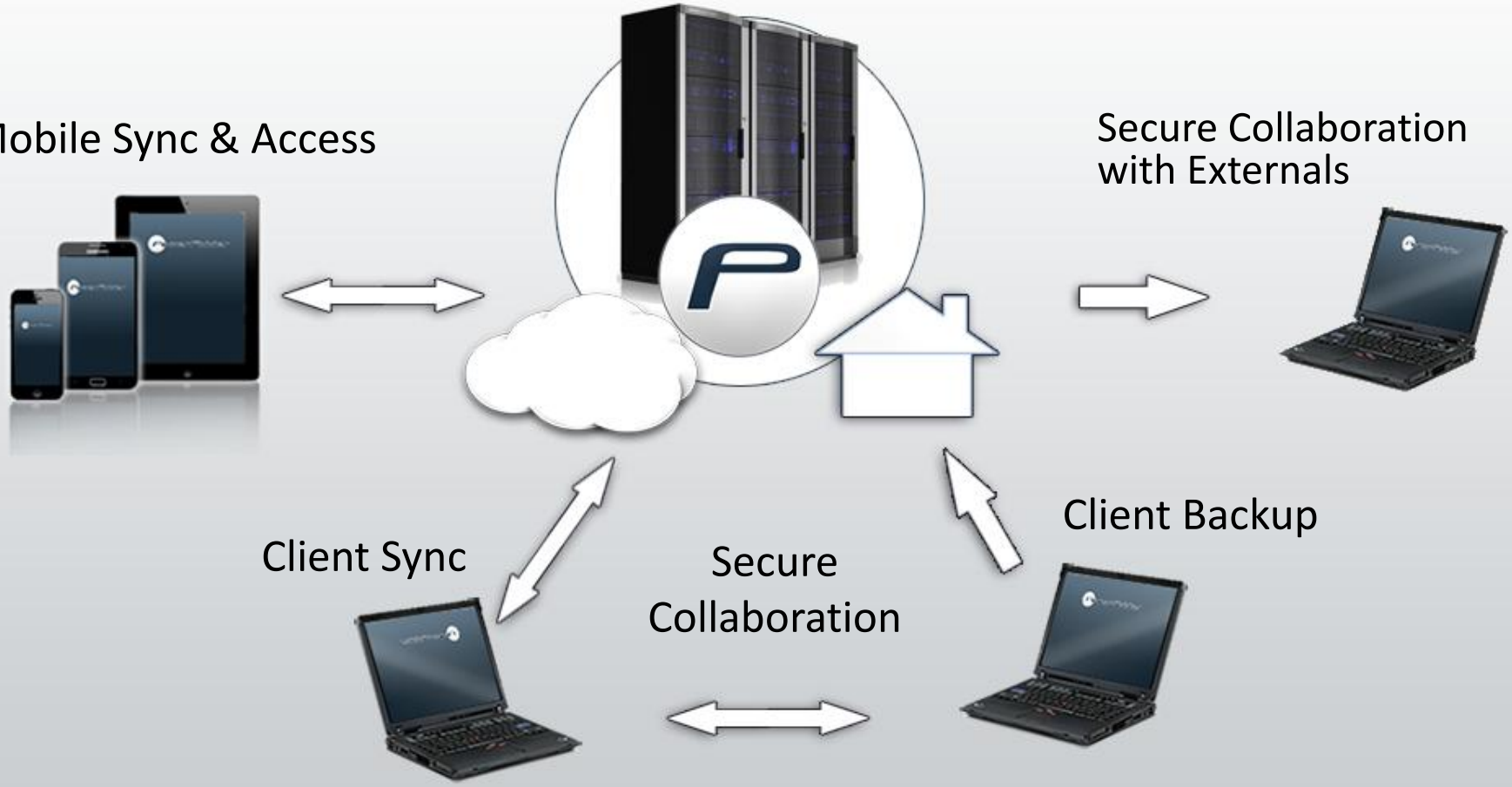
- Introduction
- Use cases / Installations
- Building a Sync & Share Cloud
  - Federated AAI
  - Large scale research scenarios
- Get started
  - Free PowerFolder Server edition
  - Cloud Services based on PowerFolder

PowerFolder - Background & Contact

- Headquartered in Meerbusch next to Düsseldorf, Germany
- Sync- and Share- Software since 2007 for Business, Education- and Research-Organizations
- Market leader for File Sync and Share solutions in education and research in Germany

- Contact: Christian Sprajc (CEO and Founder): sprajc@powerfolder.com
- Webpage: www.powerfolder.com

PowerFolder – Federated Sync and Share - easy to use, rock-solid



- Sync and Share cloud available to international universities and research organizations
- References:
  - University of Göttingen
  - Max-Planck Society
- Access via LDAP, Database, federated RADIUS and Shibboleth
- (Planned) Federated access via eduGAIN
- Flexible storage sizes - Contact PowerFolder to become a user

bw Sync & Share

Karlsruhe Institute of Technology

- Largest EDU-Sync and Share cloud in Germany
- 9 Universities plus ~65 higher educational institutions
- Reach: ~500.000 users
- Funded by the Ministry of Science, Research and Art

bw Sync & Share

Karlsruhe Institute of Technology

- Single Sign on user authentication via Shibboleth:
- DFN AAI Metadata + Discovery Service (WAYF)
- 10 GB storage per user - upgrades available
- Part of the bwLSDF project: 10 PB storage in total
- PowerFolder scored with its years of experience, its service and flexibility…

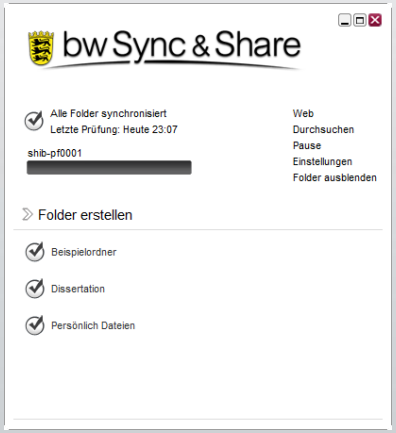
Building a Sync & Share Cloud

1. Federated AAI
2. Large scale research scenarios

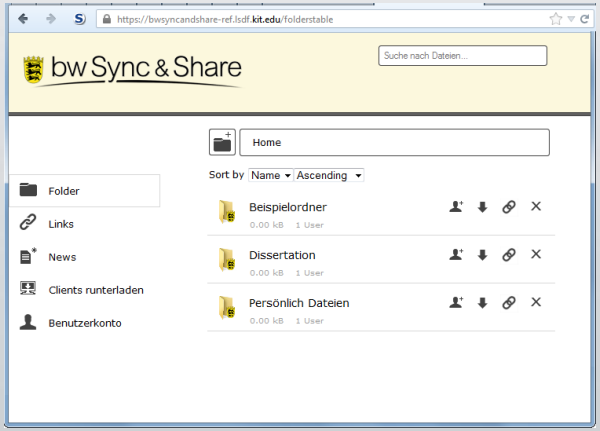
1. Federated AAI – Anywhere, anytime

Client

Win, Linux & Mac

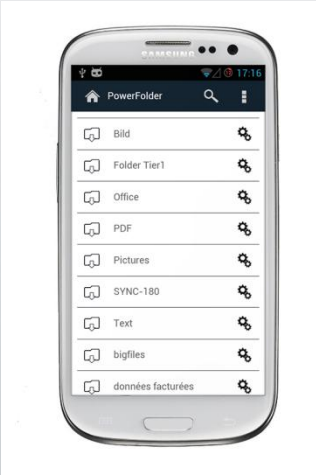


Web-Browser



Mobile Apps

iOS & Android



1. Federated AAI – Web Access

Todays AAI easily support web access…

bw Sync & Share

Der Dienst bwSync&Share ist ein Online-Speicherdienst, der es Mitarbeitern und Studenten der Universitäten und Hochschulen im Land Baden-Württemberg ermöglicht, ihre Daten zwischen verschiedenen Computern, mobilen Endgeräten und Benutzern zu synchronisieren bzw. auszutauschen und gleichzeitig am Karlsruher Institut für Technologie zu sichern. Der Datenzugriff kann dabei mit Hilfe von Sync&Share Clients füür die Betriebssysteme Windows, Mac OS, Linux, Apple iOS und Android sowie plattformübübergreifend per Webbrowser erfolgen.

Bitte wählen Sie Ihre Heimateinrichtung aus der nachfolgenden Liste...

Universität Hohenheim

Karlsruher Institut für Technologie (KIT)

Hochschule für Technik Stuttgart

Albert-Ludwigs-Universität Freiburg

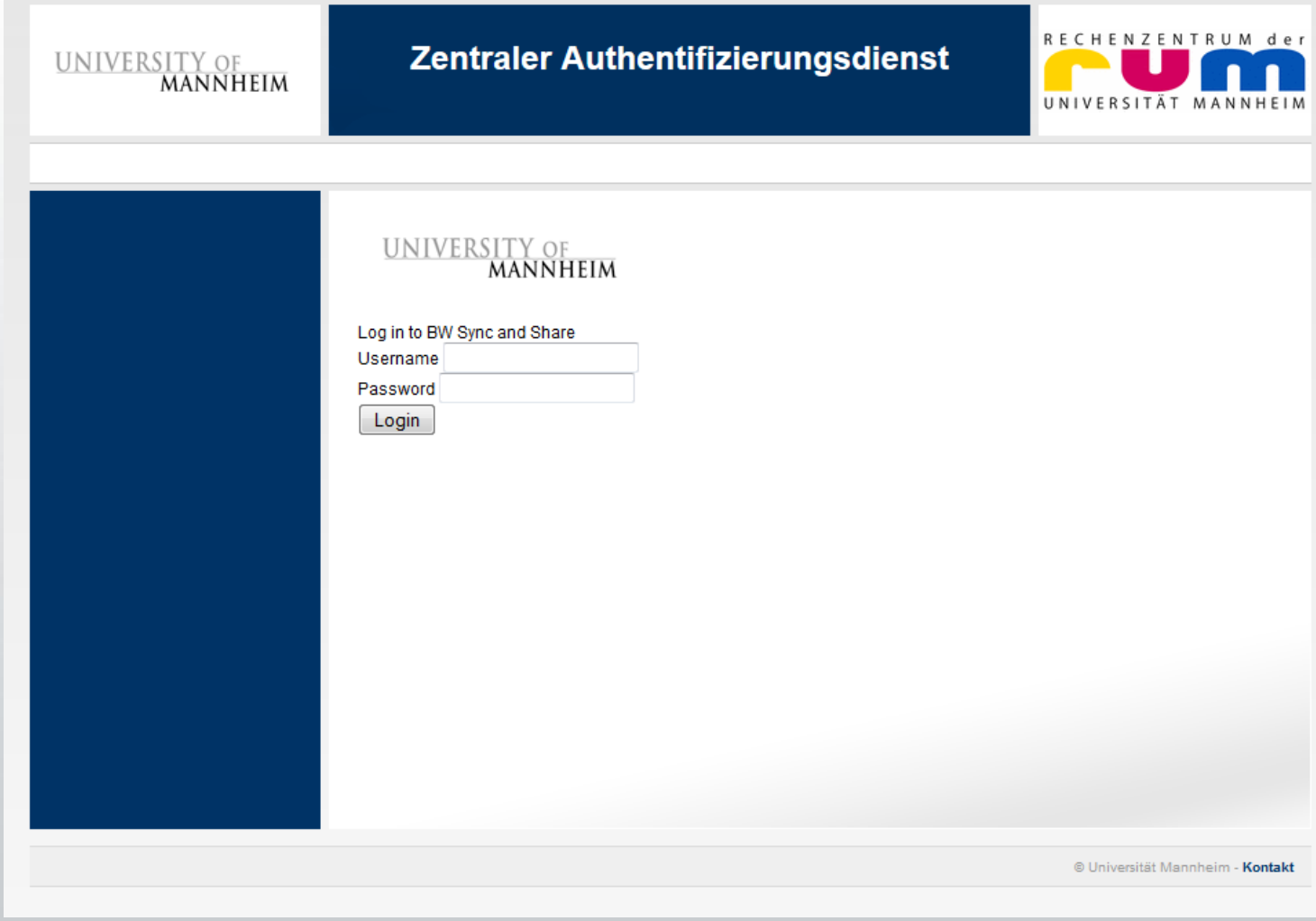
Universität Mannheim

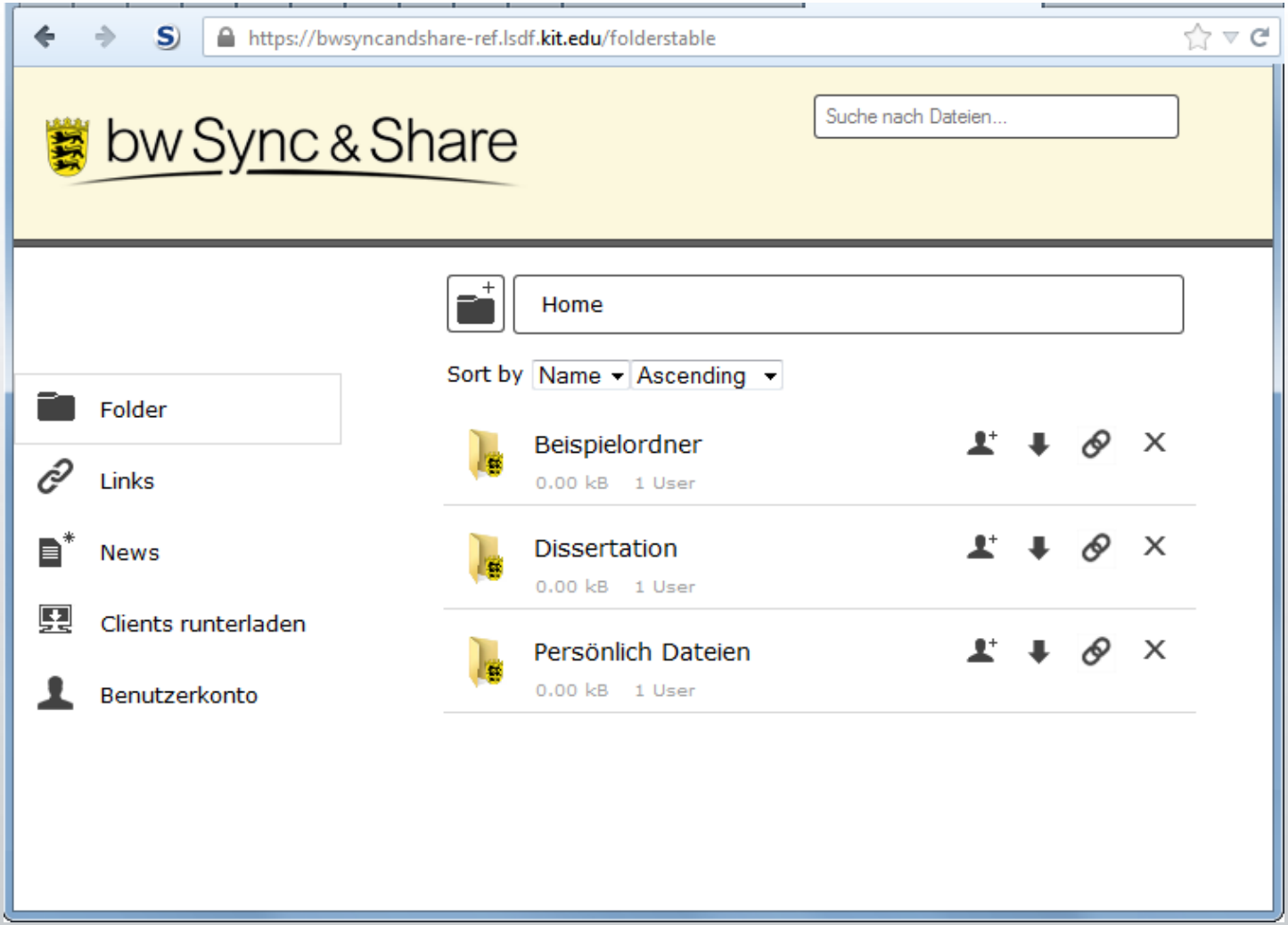
Universität Konstanz

Wählen Sie Ihre Institution aus...

OK

PowerFolder


UNIVERSITY OF MANNHEIM
Zentraler Authentifizierungsdienst
RECHENZENTRUM der
rum
UNIVERSITÄT MANNHEIM
UNIVERSITY OF MANNHEIM
Log in to BW Sync and Share
Username
Password
Login
© Universität Mannheim - Kontakt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bw Sync & Share
Suche nach Dateien...
Home
Sort by Name Ascending
Folder
Links
News
Clients runterladen
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Beispielordner
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Dissertation
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Persönlich Dateien
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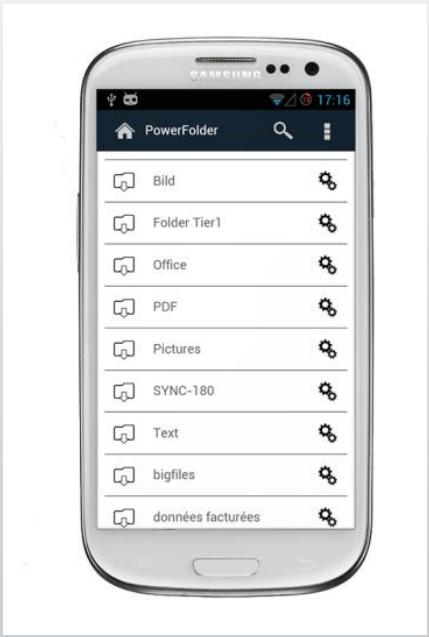
1. Federated AAI – Sync clients

For sync clients it can become tricky…



1. Federated AAI – PowerFolder Sync clients – IdP selection

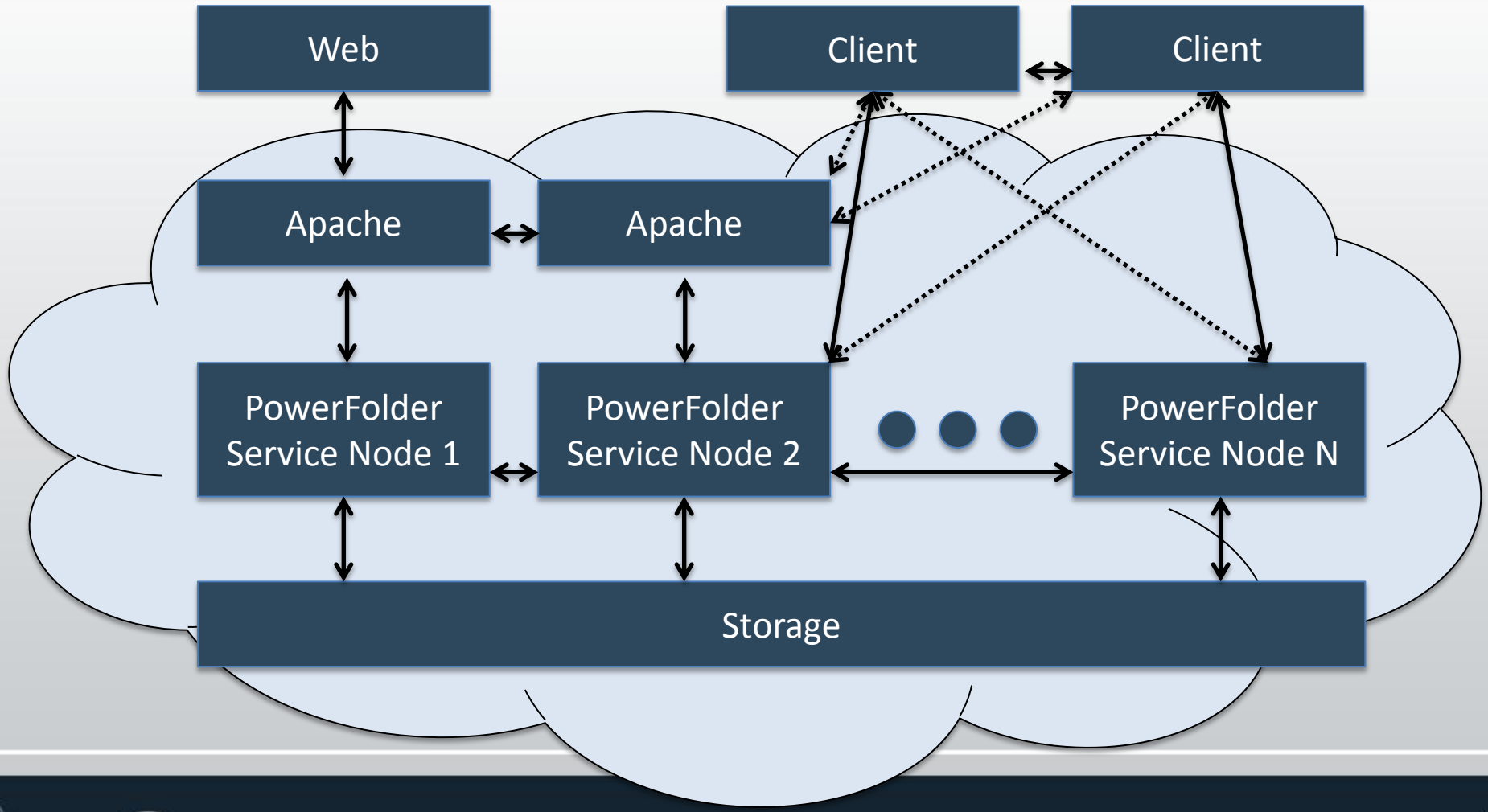
2. Large scale research scenarios

Mannheim
Heidelberg
Heilbronn
Karlsruhe
Ludwigsburg
Stuttgart &
Hohenheim
Tübingen
Ulm
bw Sync & Share
Freiburg
Konstanz

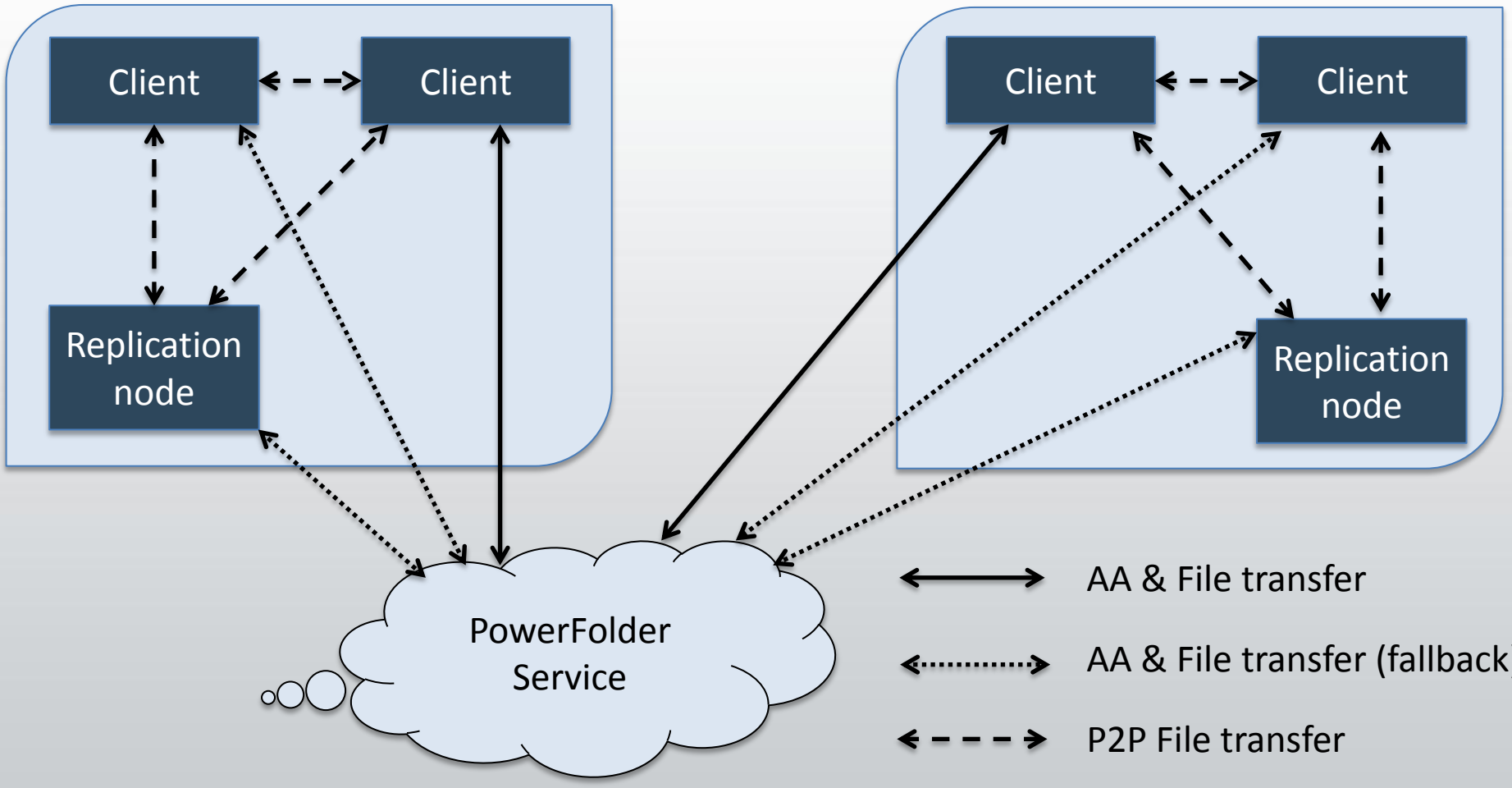
2. Large scale research scenarios

- Flexible – Service resources should scale up and down according to current load
- Highly available – e.g. upgrades should not affect the service availability
- Efficient – Utilize distributed storage locations and network connections for fast file transfer

2. Large scale – flexibility and high availability



2. Large scale – Peer-to-Peer brings efficiency



Conclusions - Your own PowerFolder Sync and Share Cloud

1. Flexibility & High availability
2. P2P helps to keep to load and traffic low – thus saves costs!
3. Built-in replication – efficient large file handling

Get started

- Build your own PowerFolder cloud:
  - Free PowerFolder Server edition at www.powerfolder.com
  - Contact us for service and support: contact@powerfolder.com

- Sync & Share Clouds based on PowerFolder: