

# **eSciDoc-based Virtual Research Environments**

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# Agenda

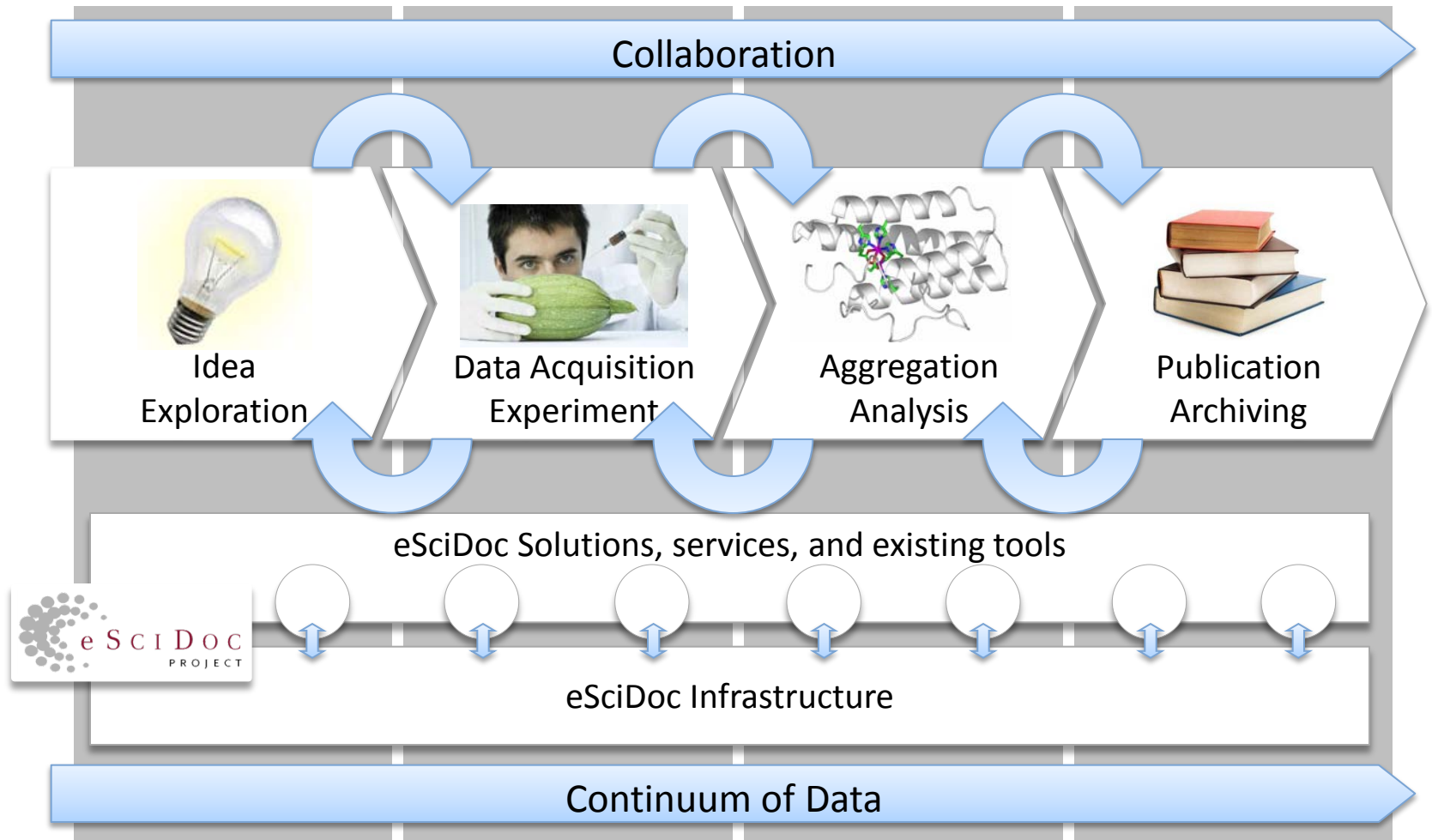
The Grand Vision

BW-eSci(T)

BW-eLabs

eSciDoc Services

# The eSciDoc Grand Vision



# Agenda

The Grand Vision

**BW-eSci(T)**

BW-eLabs

eSciDoc Services

# BW-eSci(T)

**BW-eSci(T)** will address the challenges of rolling-out an e-Research environment in the data center of a university, exemplified by one discipline (Computer Linguistics). In the course of the project, necessary tooling for administrating eSciDoc will be developed and tested, as well as new linguistic capabilities and tools will be added to the eSciDoc Infrastructure.

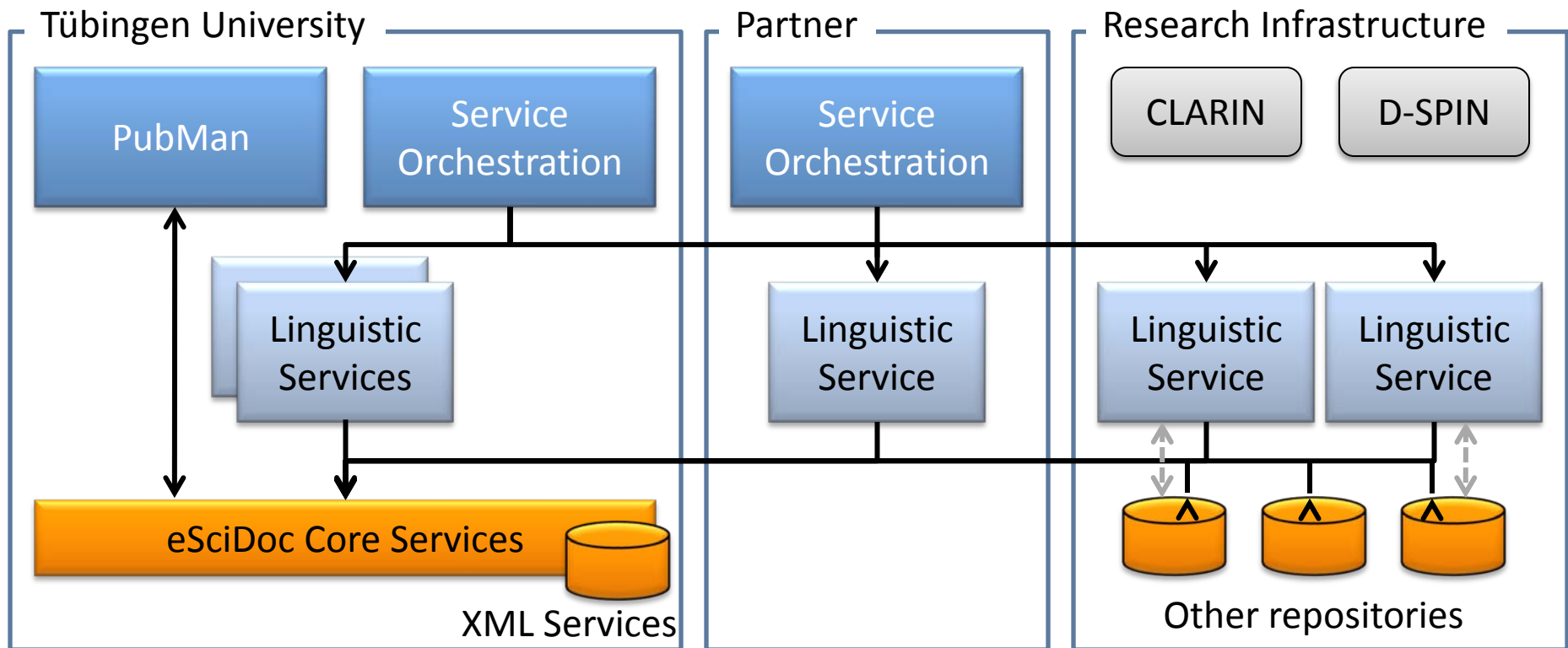
## Project Partners

- ☐ Tübingen University
- ☐ FIZ Karlsruhe

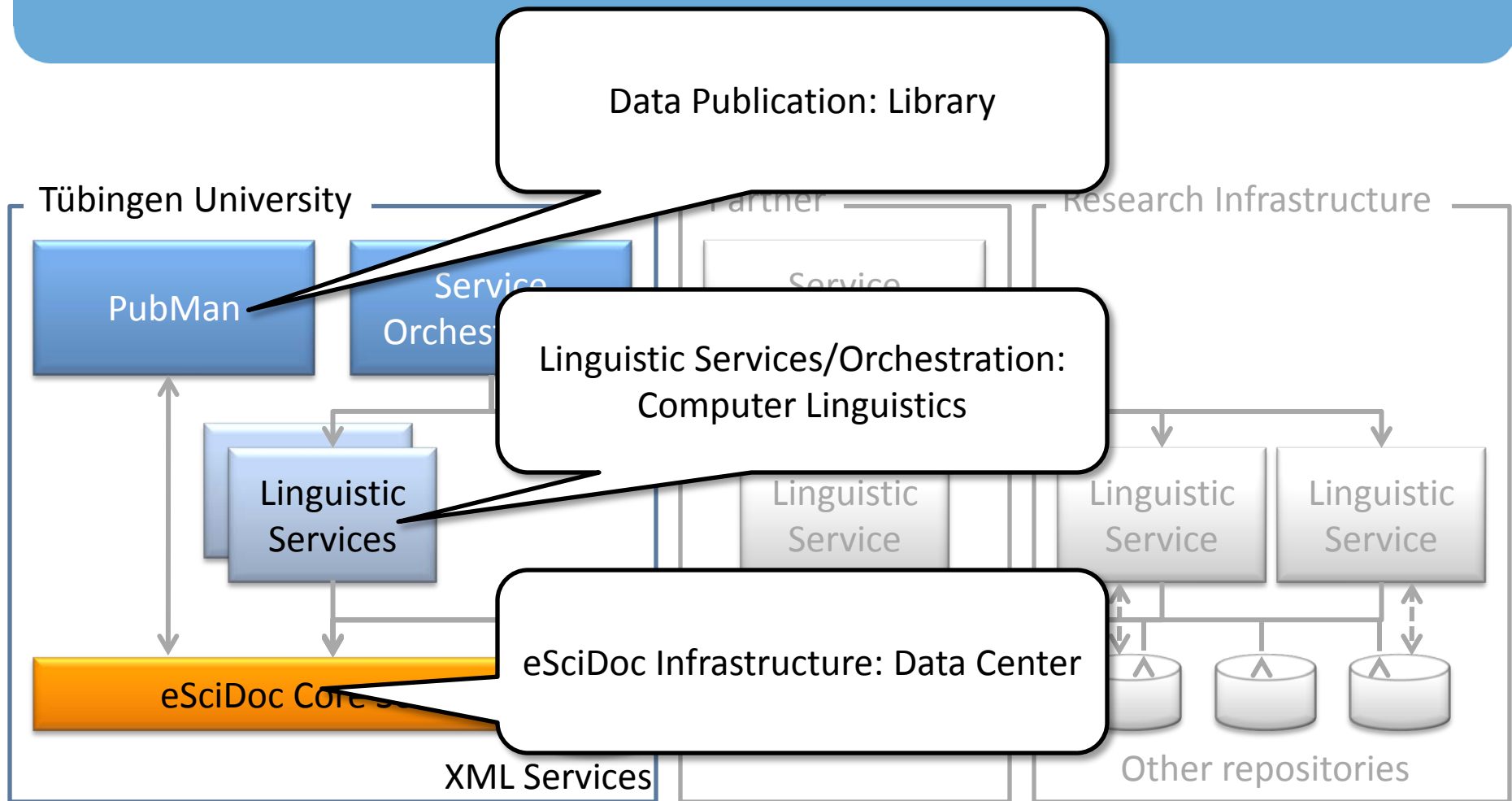
## Status

- ☐ Started (10/2009)

# BW-eSci(T): Distributed Linguistic Services



# BW-eSci(T): Responsibilities



# BW-eSci(T): Contributions to the Scholar's Workbench

- ❑ Linguistic services
  - Not all of them will be freely available
  - Tokenizers, Lemmatizer, ...
  - Mostly language-dependent
- ❑ (Orchestration Service)
  - Still under discussion
  - Technology not yet set



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The Grand Vision

BW-eSci(T)

**BW-eLabs**

eSciDoc Services

BW-eLabs gives access to virtual and remote experiments in the field of nano technology. Key concepts of the project include the reproducibility of experiments, discoverability of and access to primary data, and the storage and curation of all artifacts that emerge throughout the research process.

## Project Partners

- ☐ Stuttgart University
- ☐ HDM Stuttgart
- ☐ Freiburg University
- ☐ FIZ Karlsruhe

## Status

- ☐ Started (08/2009)

# BW-eLabs: Experiments

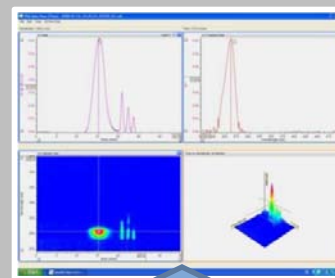
## Preparation



## Synthesis and Online Analysis



## Offline Analysis and Visualization



## Publication



## Common Data Infrastructure



Experiment



Experiment



Data Objects



Experiment



Data Objects

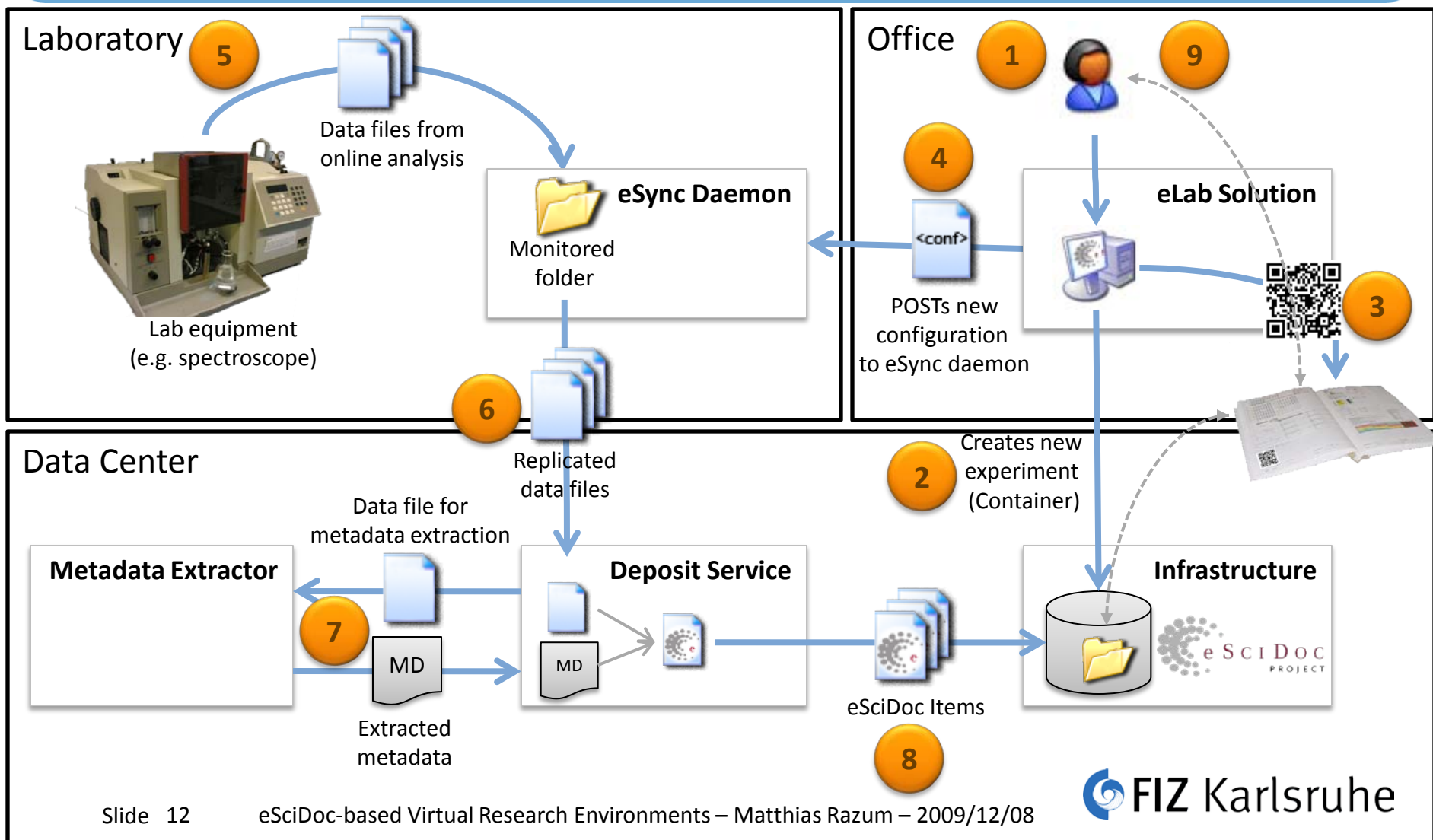


Experiment

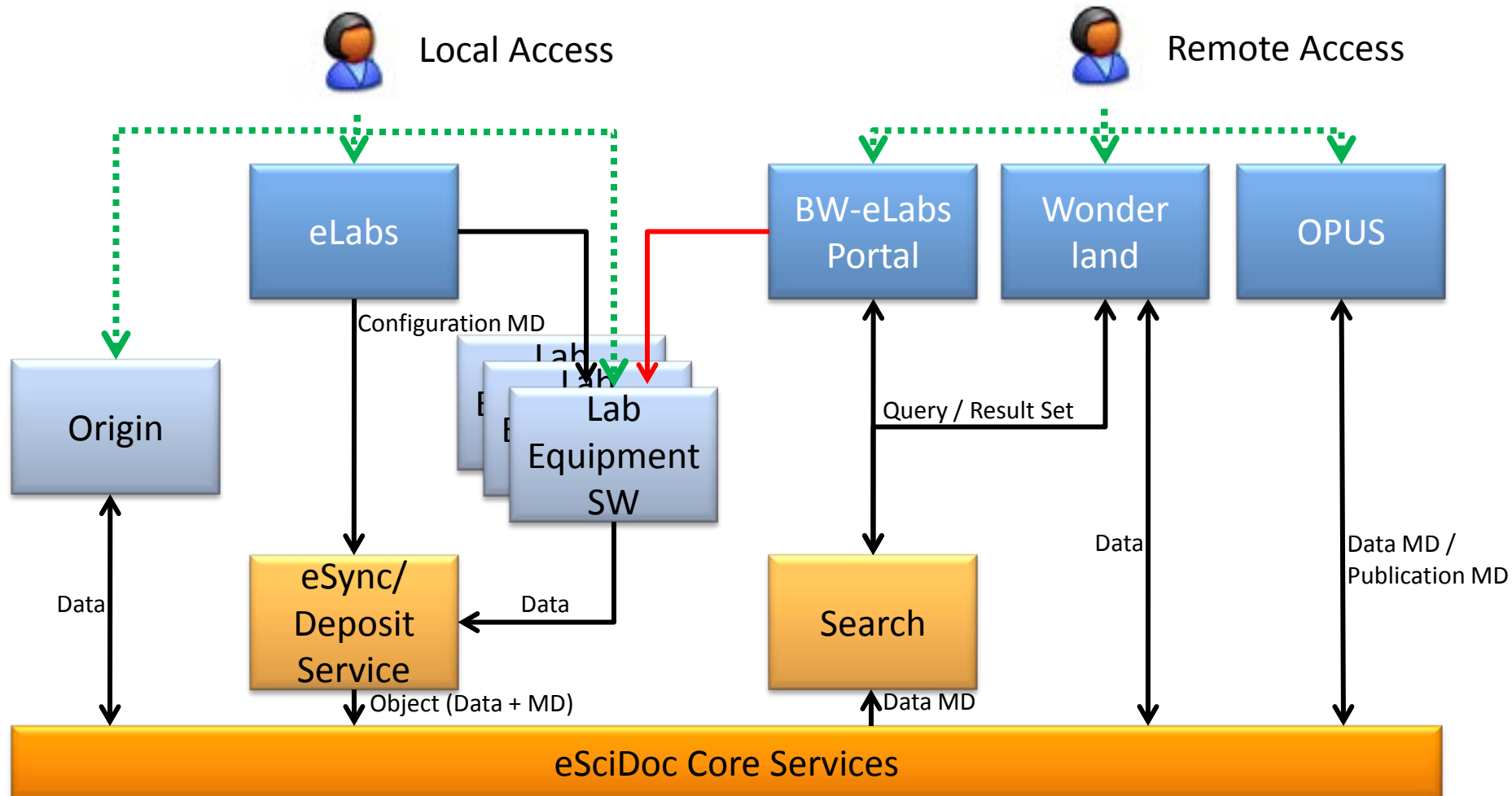


Data Objects

# BW-eLabs: Data Acquisition in the Lab



# BW-eLabs: Overview



# BW-eLabs: Contributions to the Scholar's Workbench

- ❑ QR Code Reader/Generator
  - Java-based, works only on Windows
  - Available as web service as well
- ❑ eSync Daemon
  - Java-based, works on Windows (Linux and MacOS will follow)
- ❑ Metadata Extractor
  - Java-based with plug-in architecture
  - Derived from Harvard's FITS service
- ❑ (Deposit Service)
  - Java-based, depends on eSciDoc as data sink
  - May be adapted to work directly with Fedora

# Agenda

The Grand Vision

BW-eSci(T)

BW-eLabs

**eSciDoc Services**

# eSciDoc Services



## Policy Enforcement Point

Report Service

Report Definition Service

Aggregation Definition Service

Statistics Data Service

Scope Service

Statistics Manager

Set Service

Content Model Service

Item Service

Container Service

Context Service

Organizational Unit Service

Object Manager

Admin Service

User Account Handler

Role Handler

Group Handler

Security





# Thank you !

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