EUDAT

Towards interoperability with a Reference Model Process

Morris Riedel
Juelich Supercomputing Centre
Task Force Leader ‚Data Replication‘

SEVENTH FRAMEWORK PROGRAMME

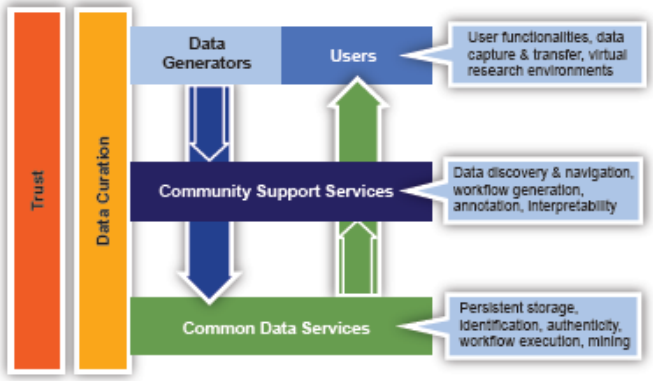
EUDAT

OGF34, Oxford, 14th March 2012

EUDAT 101

EUROPEAN DATA INFRASTRUCTURE

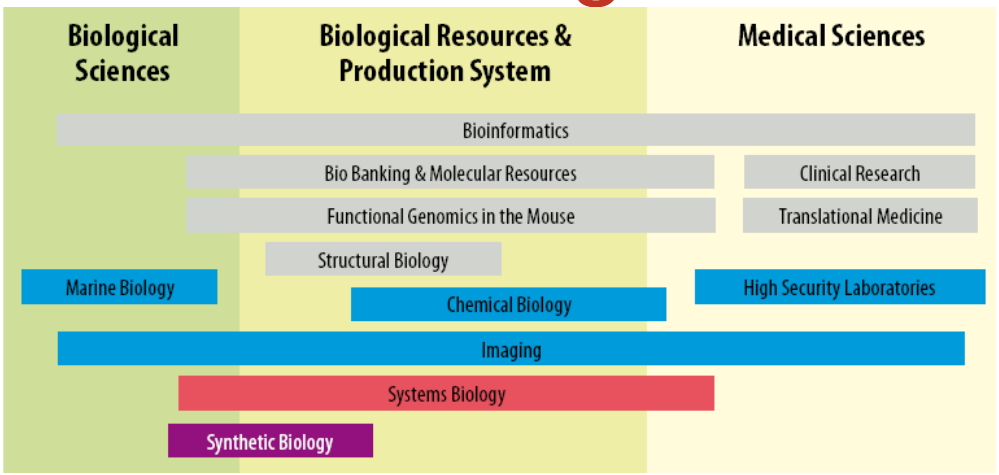
TOWARDS A EUROPEAN COLLABORATIVE DATA INFRASTRUCTURE



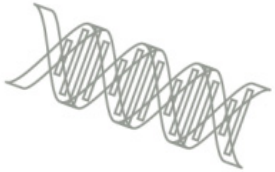
CDI

EUDAT is a new European initiative that will help deliver a Collaborative Data Infrastructure (CDI) with the capacity and capability to handle the scale and complexity of the data that will be generated over the next 10-20 years.

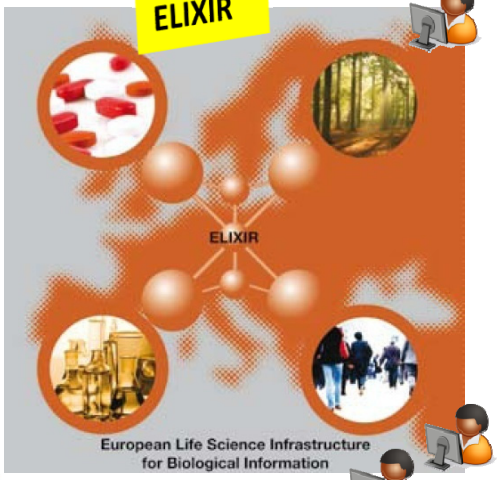
ESFRI Biological and Medical Sciences



BBMRI

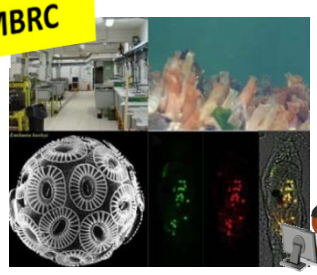


ELIXIR



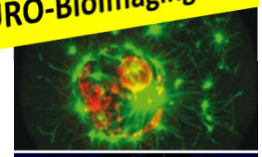
ECRIN

EMBRC



EU-OPENSCREEN

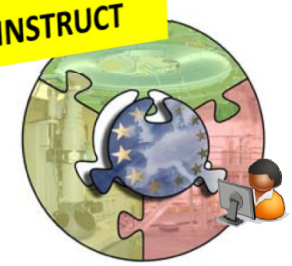
EURO-BioImaging



BSL4 Laboratories

INFRAFRONTIER

INSTRUCT



EATRIS

EATRIS
European Advanced Translational Research Infrastructure in Medicine

EUDAT

ESFRI Environmental Sciences

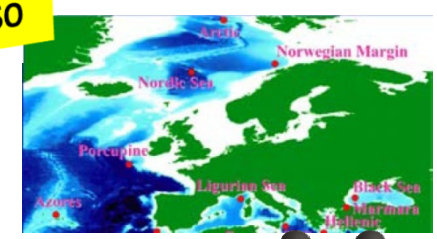
Aurora Borealis

COPAL (ex EUFAR)

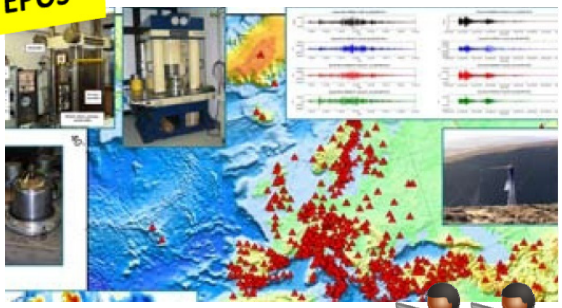
COPAL
European Community Airborne Laboratory

EISCAT_3D

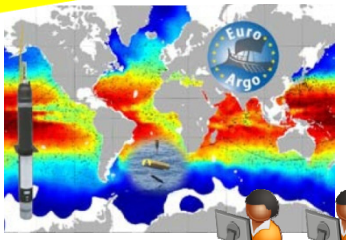
EMSO



EPOS



EURO ARGO



IAGOS

LIFEWATCH

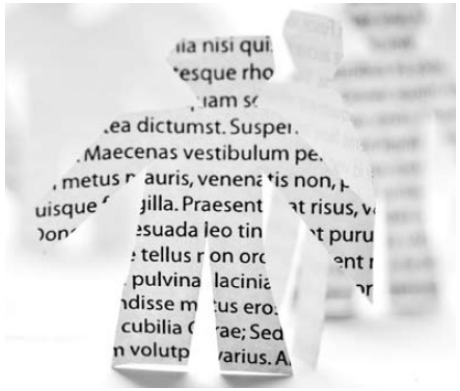
ICOS

icos integrated carbon observation system

SIAEOS

EUDAT

ESFRI Social Sciences and Humanities



CLARIN

DARIAH

DARIAH
Digital Research Infrastructure
for the Arts and Humanities

ESS

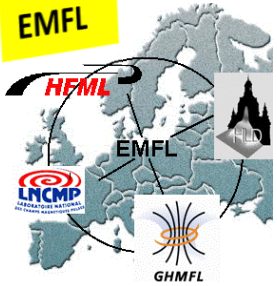
SHARE

CESSDA

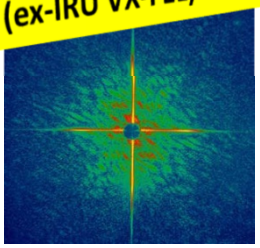
EUDAT

ESFRI Projects - Materials and Analytical Facilities

EMFL



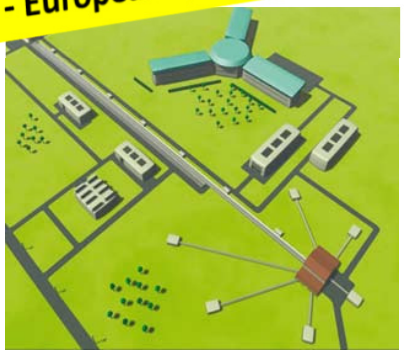
EuroFEL (ex-IRU VX-FEL)



European XFEL

ESRF Upgrade

ESS - European Spallation Source

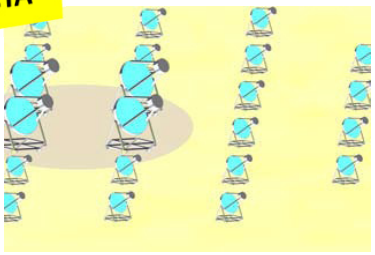


ILL 20/20 Upgrade

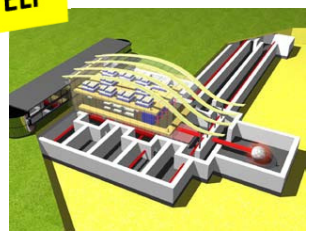
EUDAT

ESFRI Projects – Physical Sciences and Engineering

CTA



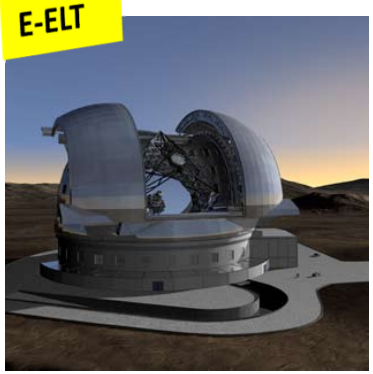
ELI



KM3NeT

PRINS

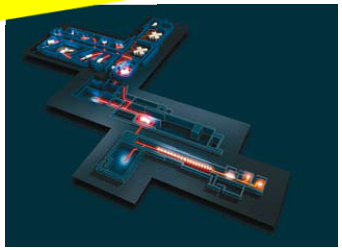
E-ELT



FAIR

panda

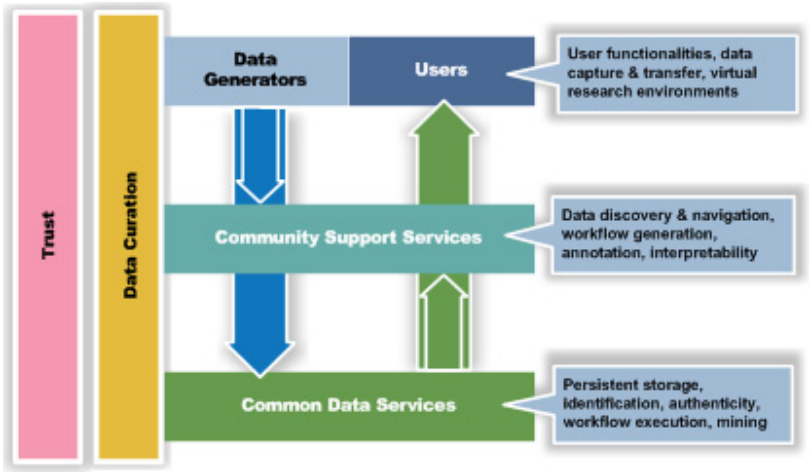
SPIRAL2



SKA

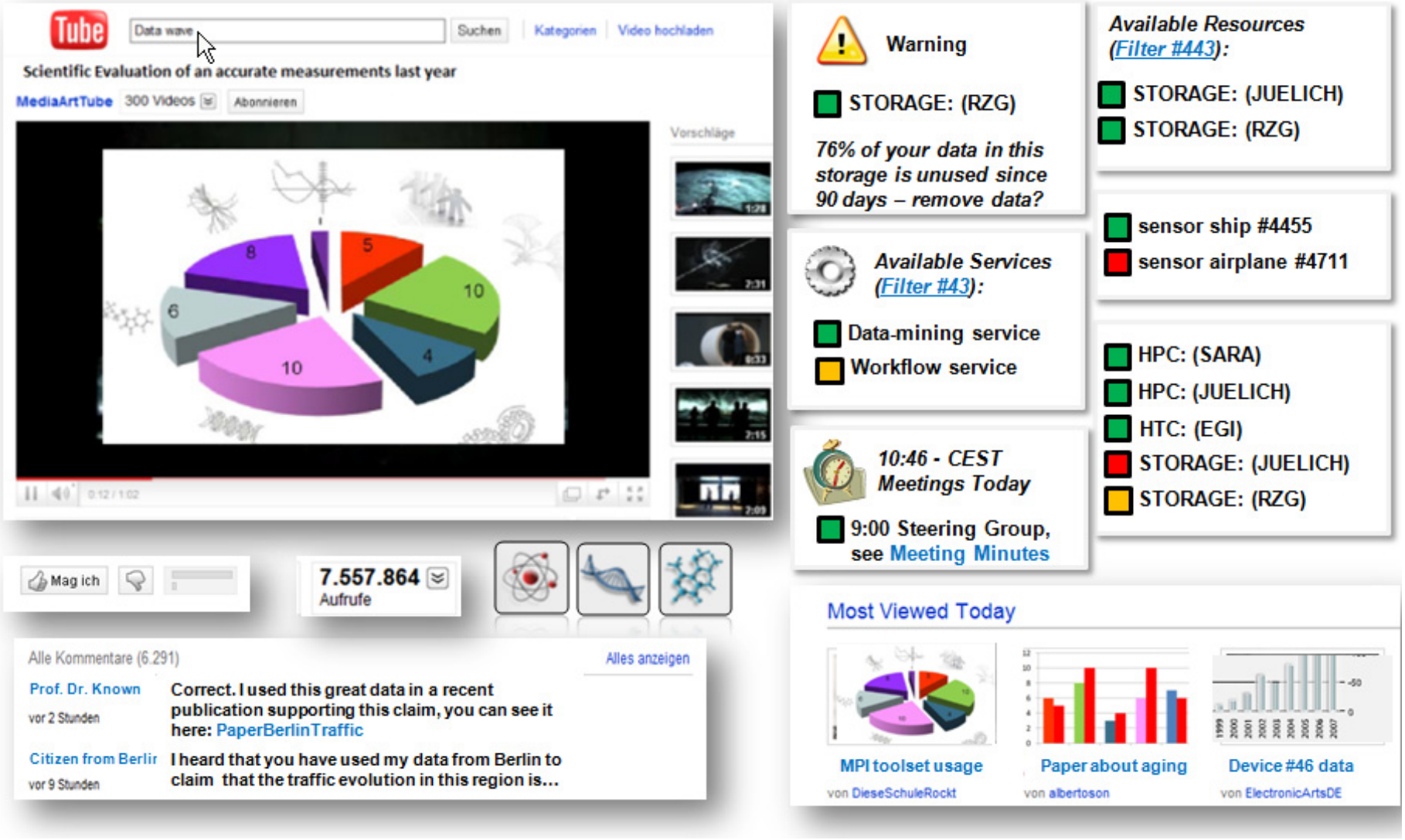
EUDAT

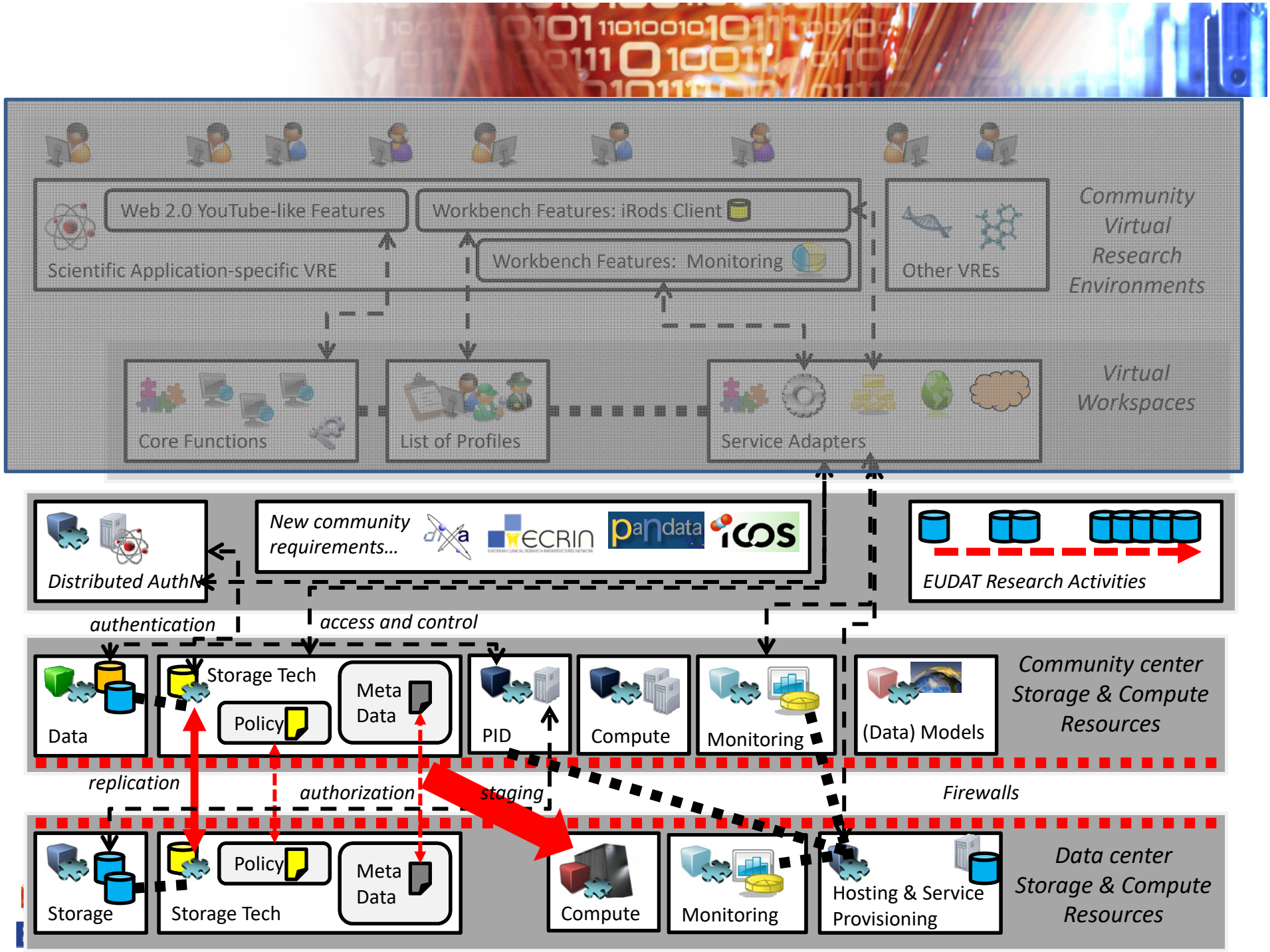
Federated Vision

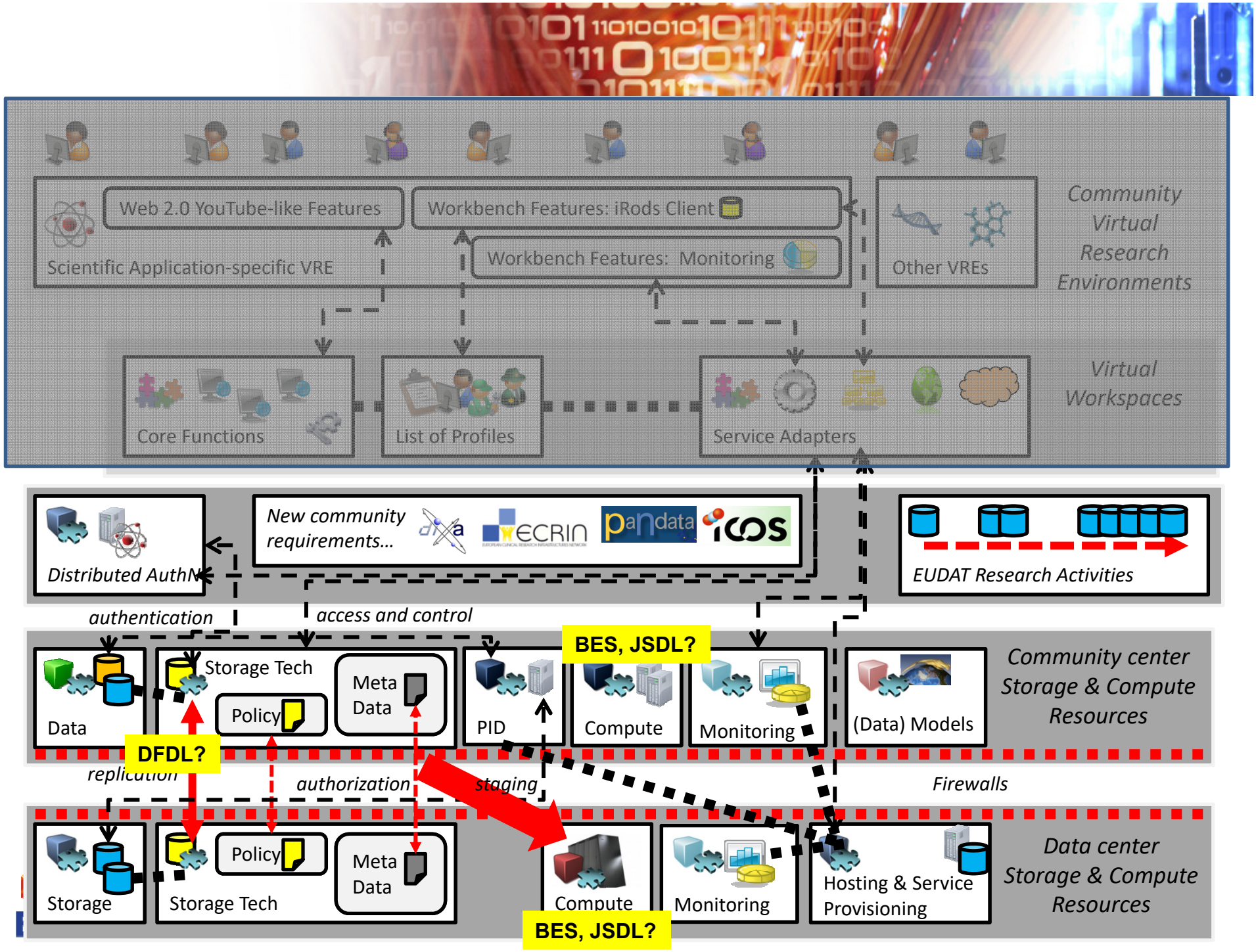


'…ensure that user communities are in the driving seats'

‚ScienceTube‘ – A user view of it…




Web 2.0 YouTube-like Features
Workbench Features: iRods Client
Workbench Features: Monitoring
Scientific Application-specific VRE
Other VREs
Community Virtual Research Environments
Core Functions
List of Profiles
Service Adapters
Virtual Workspaces
Distributed AuthN
New community requirements…
EUDAT Research Activities
authentication
access and control
Data
Storage Tech
Policy
Meta Data
PID
Compute
Monitoring
(Data) Models
Community center Storage & Compute Resources
replication
authorization
staging
Firewalls
Storage
Storage Tech
Policy
Meta Data
Compute
Monitoring
Hosting & Service Provisioning
Data center Storage & Compute Resources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List of Profiles
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New community requirements…
EUDAT Research Activities
authentication
access and control
BES, JSDL?
Storage Tech
Meta Data
Policy
Data
PID
Compute
Monitoring
(Data) Models
Community center Storage & Compute Resources
DFDL?
replication
authorization
staging
Firewalls
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