



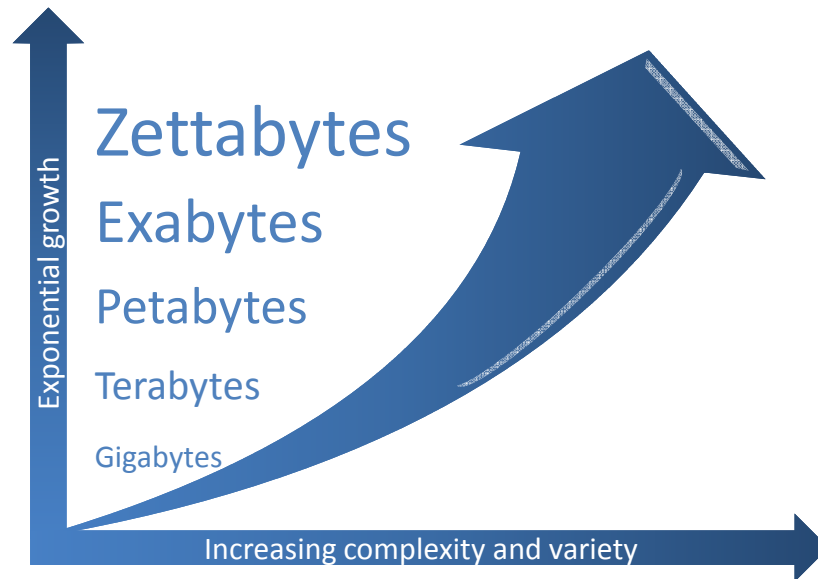
EUDAT: a cross- disciplinary data infrastructure in Horizon 2020

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Things get more complex...



- Where to store it?
- How to find it?
- How to make the most of it?





... and we need to promote synergy

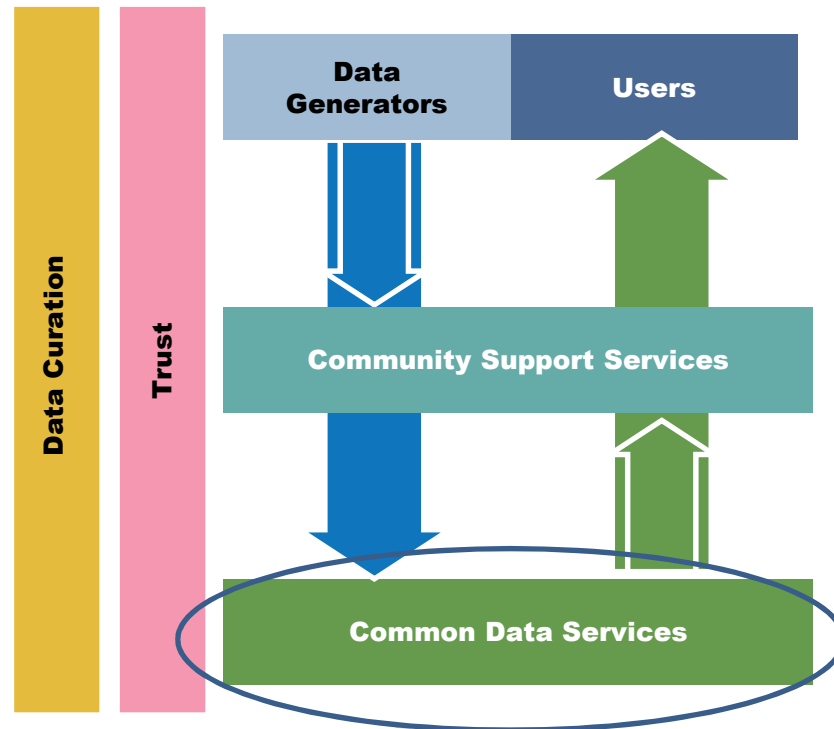
- The worst case scenario: 300 RI equals 300 incompatible self-made ICT systems
- What can we do to promote collaboration and re-use of e-infrastructure?

EVERY RI NEEDS TO DEAL WITH DATA MANAGEMENT





The Collaborative Data Infrastructure -A framework for the future? -





European Data



EUDAT

- Start date: 1st October 2011
- Duration: 36 Months
- Budget: 16.3 M€ (9.3M€ EC)
- EC Call: INFRA-2011-1.2.2
- Consortium: 25 partners from 13 countries
 - National data centers, technology providers, research
- Objectives:
 - Cost-efficient and high-quality CDI
 - Meetings users' needs in flexible and sustainable way
 - Across geographical and disciplinary boundaries



Researchers, citizens,
industry and society...

<http://www.eudat.eu>





Consortium

25 European partners



EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



KIT
Karlsruhe Institute of Technology



INGV



BSC
Barcelona
Supercomputing
Center
Centro Nacional de Supercomputación

epcc

DKRZ
DEUTSCHES
KLIMARECHENZENTRUM



CINECA

INES
Centre Informatique National
de l'Enseignement Supérieur

CSC



Red IRIS

Max-Planck-Institut
für Meteorologie

JÜLICH
FORSCHUNGSZENTRUM

rzg
RECHEN-
ZENTRUM
GARCHING

Science & Technology
Facilities Council

maatG

CERFACS

umweltbundesamt^U
ENVIRONMENT AGENCY AUSTRIA

POZNAN
UNIVERSITY OF TECHNOLOGY

SNIC

Trust-IT Services Ltd
Communicating ICT to markets

UNINETT
Sigma

SURF SARA

UCL

EUDAT



User Forums + 25 communities



1st User Forum
7-8 March 2012,
Barcelona





Metadata Catalogue

Aggregated EUDAT metadata domain.
Data inventory



AAI

Network of trust among authentication and authorization actors



PID

Identity
Integrity
Authenticity
Locations



Safe Replication

Data curation and access optimization



Data Staging

Stage data to computation



Simple Store

Researcher data store (simple upload, share and access)



Dynamic Data

immediate handling



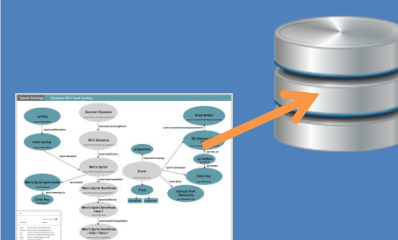
EUDAT Box

dropbox-like service
easy sharing
local syncing

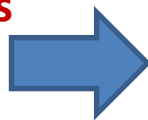


Semantic Anno

checking & referencing



New services
to come





Towards Horizon2020

Synergy

Sustainability

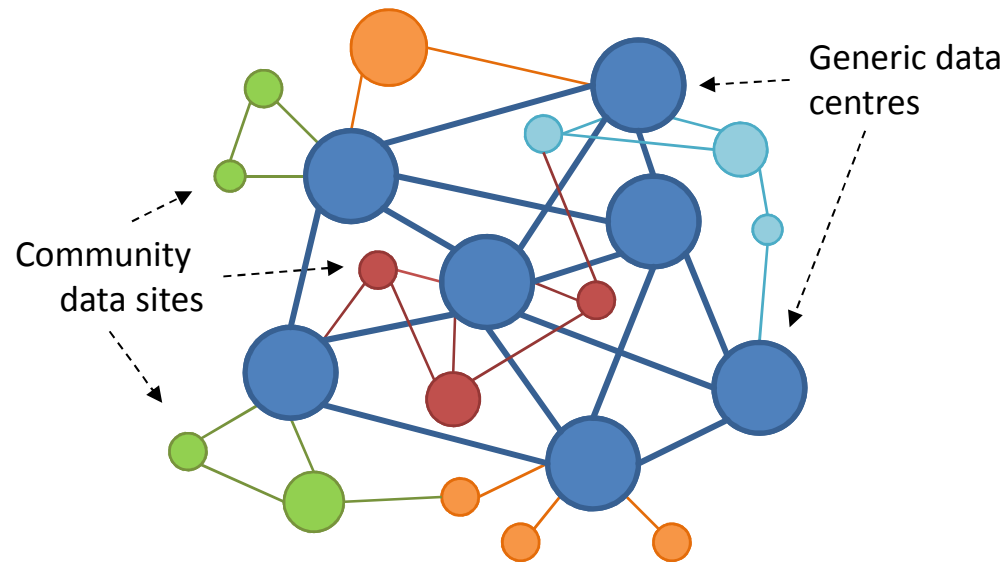
Trust

Global collaboration

User driven services

Joint e-infrastructure roadmaps

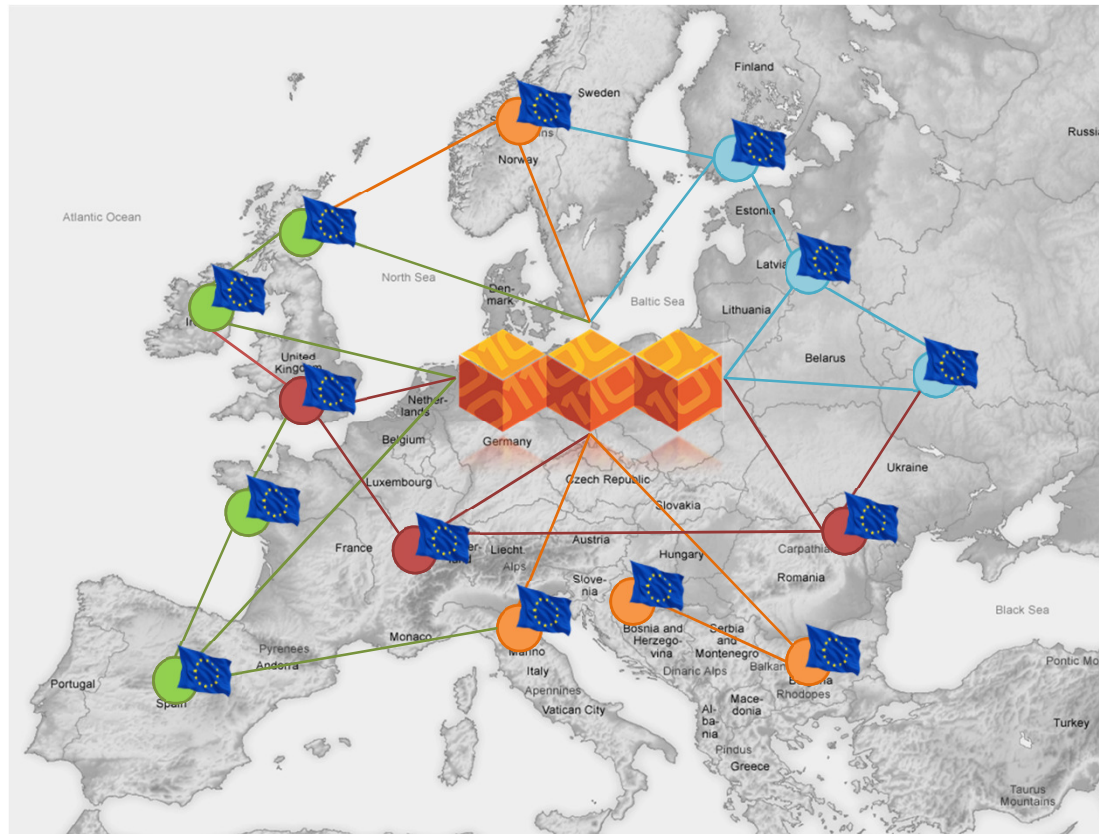
A Network of Trusted Centers



- Strong and sustainable generic data centers with existing trusted relationships
- Each having specific relationship with research communities
- EUDAT is about providing solutions in a federated environment



Bridging National and European solutions



- Strong requirement from researchers and funders
- Path to Sustainability



elixir Data for Life
EU SOLARIS

COPAL
European Research Infrastructure for Concentrated Solar Power
European Community Airborne Laboratory

DARIAH-EU
EuroFEL EUROPEAN FREE ELECTRON LASERS
EISCAT
ICOS

cta cherenkov telescope array
SIOS European Infrastructure for Translational Medicine
EMBRIC EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE
instruct Integrating Biology
EURO-BIOIMAGING

BBMRI Biobanking and Biomolecular Resources Infrastructure
EMSO EUROPEAN MULTIDISCIPLINARY SEAFLOOR OBSERVING SYSTEM
EU-OPENSREEN Chemical keys for life's locks
ERINHA
ESS EUROPEAN SPALLATION SOURCE
IFMIF

EPOS EUROPEAN PLATE OBSERVING SYSTEM
EMFL European Magnetic Field Laboratory
Lifewatch extreme light infrastructure
anaee
CLARIN
MIRHA
ECRIN EUROPEAN OPTICAL RESEARCH INFRASTRUCTURE NETWORK
ECCSEL

DASISH
BioMedBridges
ENVRI
CRISP

PRACE
eGI
EUDAT
HORIZON
LIxBULA THE SCIENCE CLOUD
GEANT
OpenAIRE Open Access Infrastructure for Research in Europe

HORIZON 2020



Science is global. So should be the e-infrastructure and related services



- Research collaborations are global
- E-Infrastructures must follow
 - Examples from the networks
- Sustaining Global Forums
 - RDA, CODATA



Three priorities towards H2020

- We need to build trust between researchers and e-infrastructure providers
 - Synergy, efficiency, proper workload division
- What we do in European level need to link tightly to national and global activities
 - Most of the funding for e-infrastructure is national
 - Researchers don't want to have too many layers
- The services need to be user driven
 - What to do: user communities, how to implement: technology providers
 - Co-design: EUDAT has user communities as partners, not only as customers



But remember that in order to be
successful...



... innovative and optimistic attitude is the main thing



Thank You!