

<http://www.ipsl.fr>
eudat@ipsl.jussieu.fr

Agenda

- IPSL presentation
- B2SAFE replication project

EUDAT 3rd conference

24-25 september 2014

Amsterdam

Franck Corsini – IPSL/CNRS

Stéphane Coutin - CINES

Institut Pierre Simon Laplace

- Research federation – founded in 1991 By Gérard Mégie
- Gather 8 laboratories
- More than 1250 scientists and engineers

What science at the IPSL ?

- Main research topic : develop science and understanding of Earth's global environment
 - understand dynamical, chemical & biological processes in the oceans and in the atmosphere
 - understand the natural climate variability at various scales
 - understand impacts of human activities
 - themes related to solar system and other planets

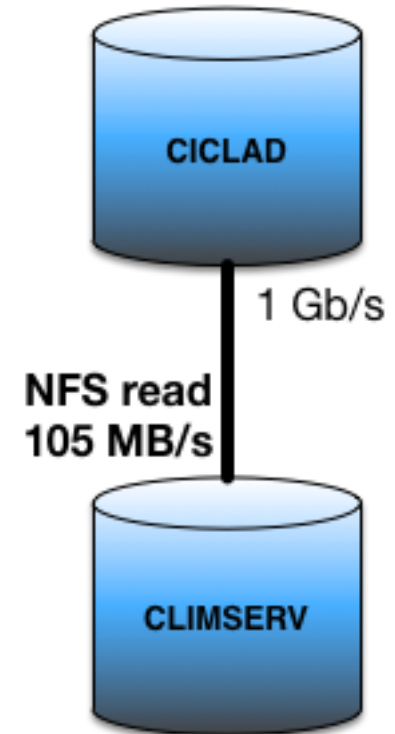
- Development of generic tools :
 - models for climate modelisation
 - development of an integrated Earth system model (atmosphere, oceans, cryosphere and lithosphere)
- Observation data
 - gathering data from various instrumental tools
 - Earth satellite data (IASI – GOSAT)
- Distribute data
 - member of ESGF (Earth System Grid Federation)
 - member of ENES community

So what do we need to work ?

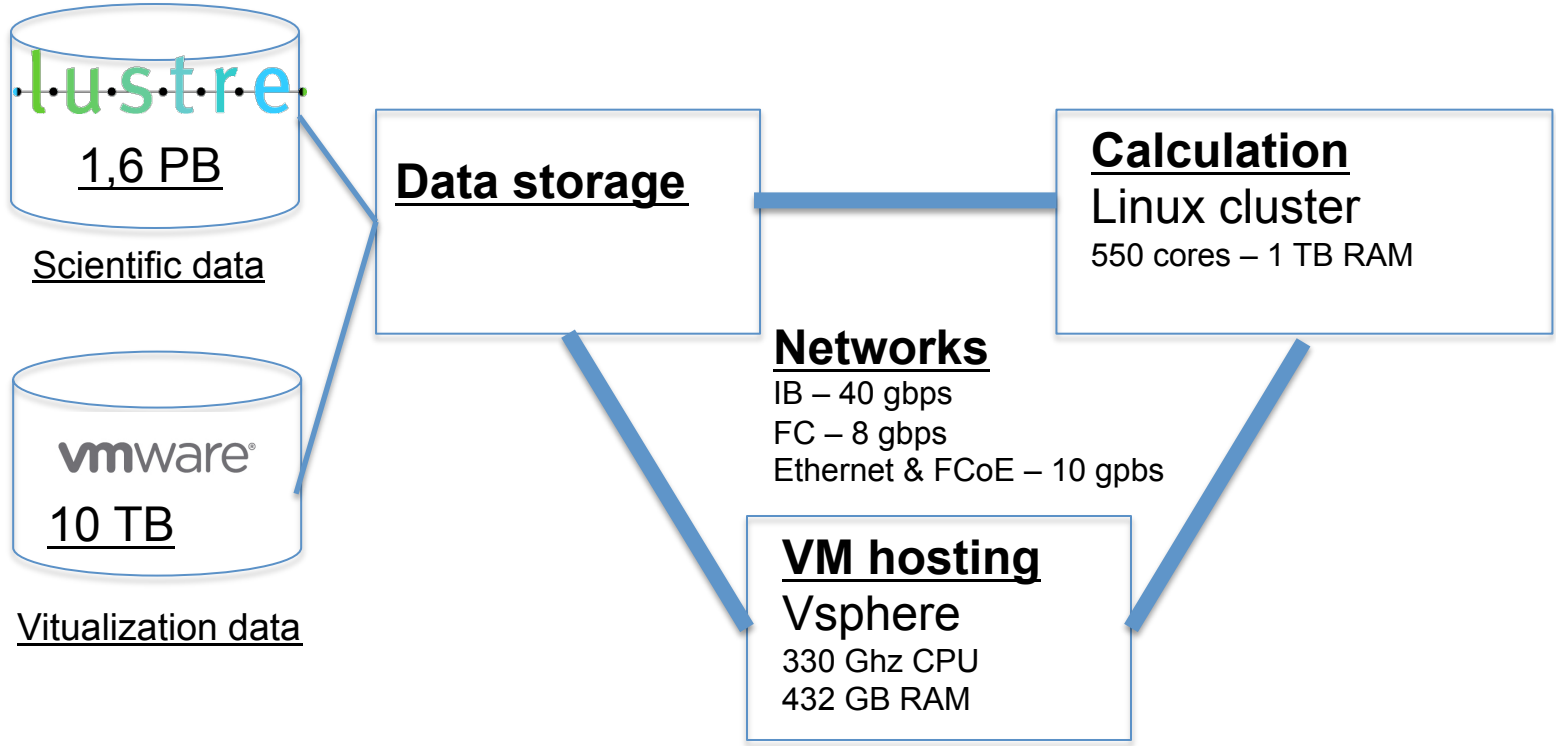
- Data storage
- HPC (close to data and users)
- Data distribution

With what facility ?

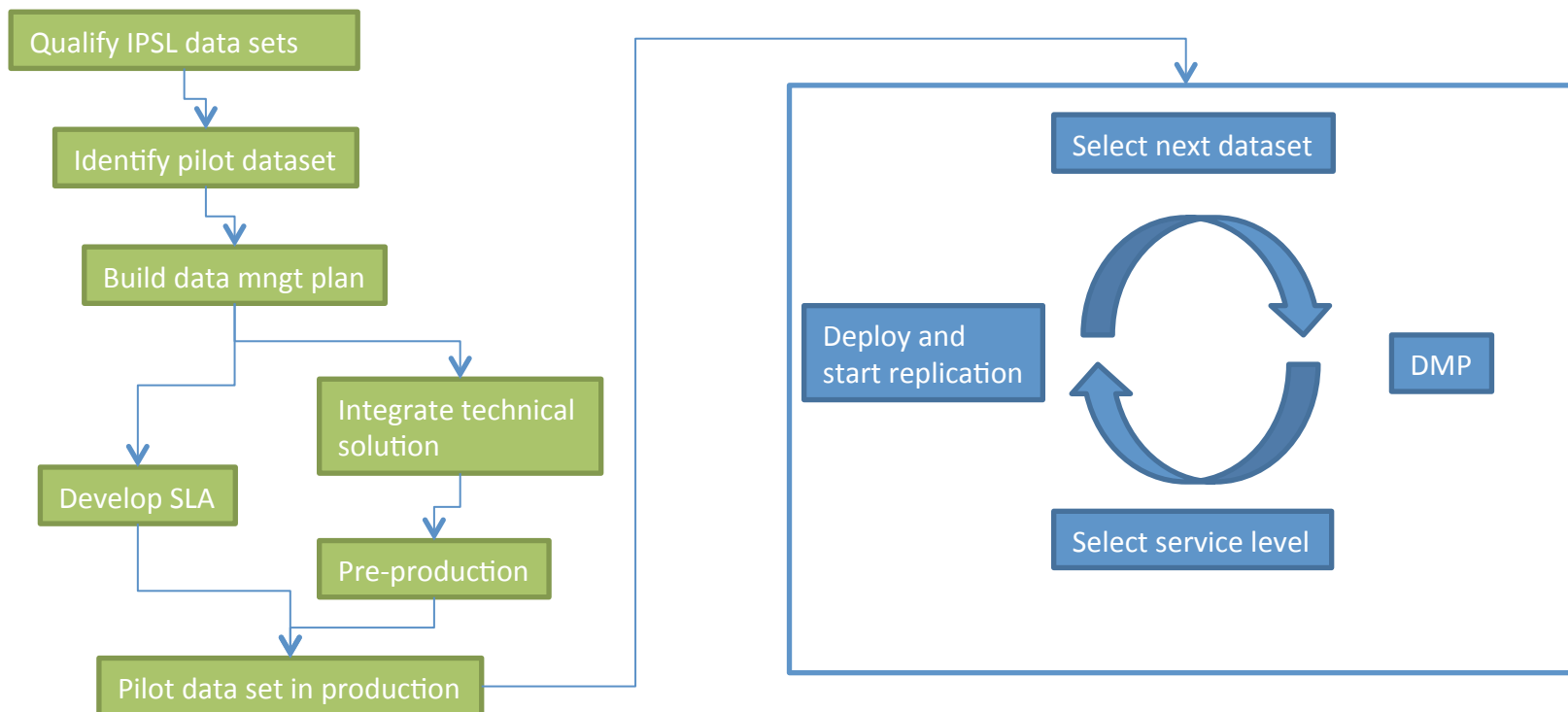
- 2 data clusters (<http://mesocentre.ipsl.fr>)
- CICLAD and CLIMSERV
- Linked (since august 2014) by a dedicated 1 Gb FO link

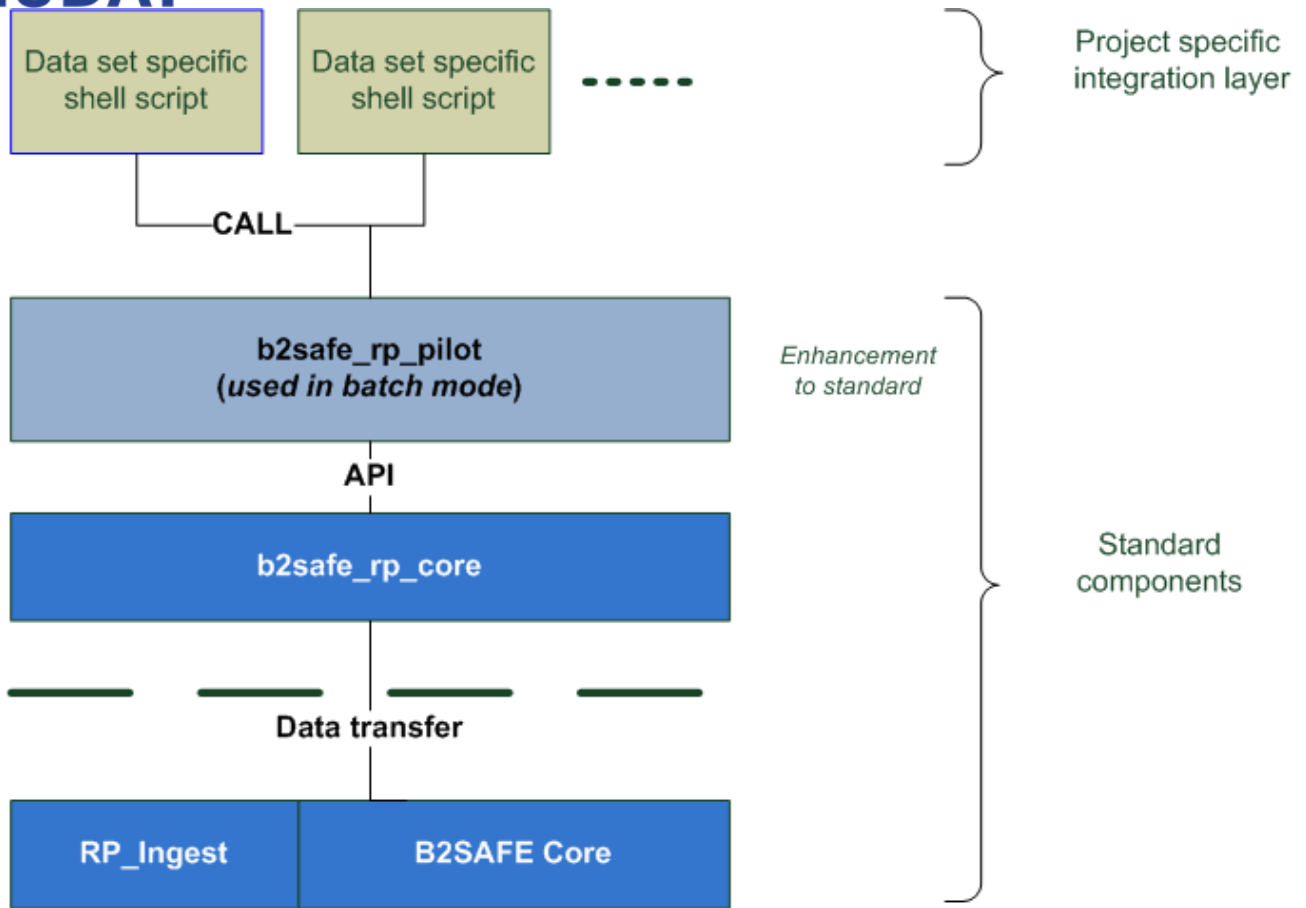


CICLAD focus : supported by IPSL and dedicated to climate and environmental community



- Need to secure a subset of our scientific data (primary storage on disks)
- 2 dataset categories
 - Very costly or non reproducible data – observation, modeling results (60 TB)
 - Dataset requiring durable archiving - (500 TB)
- Data format
 - modeling results datasets (HDF5)
 - observation datasets (NetCDF, ASCII, « project-specific » binairie)
 - satellite datasets (ASCII, BUFR, HDF5)
- Life before Eudat
 - « local » archives on LTO tapes
 - time consuming
 - quite unsafe (archived data in the same room as disks)





- The project benefits from other EUDAT aspects :
 - Data Management Plan based approach to identify requirements for each dataset.
 - Building an SLA based on standard EUDAT SLA template
 - User/admin documentation is available
 - Standard operation tools are used (helpdesk, monitoring, ...)
- This is more than a technical solution, it is service deployment
- Still to be clarified (EUDAT 2?)
 - What cost model should be used for long term?
 - Will this be compatible with IPSL resources?

MERCI !

- Thanks to EUDAT to help IPSL for this project (Johannes Reetz)
- Thanks to CINES (Stephane Coutin – Marion Massol)
- Thanks to France Grille to help IPSL on irods

