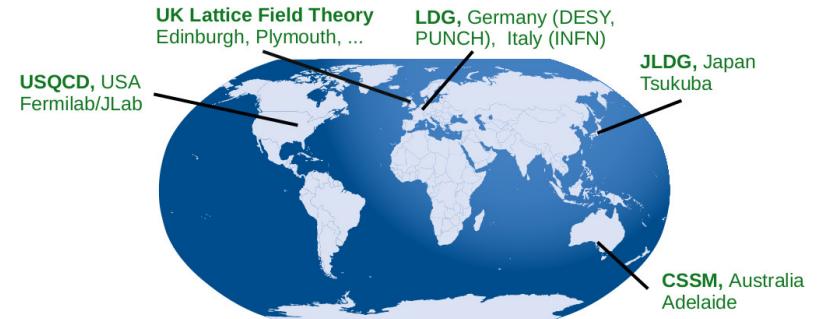


International Lattice Data Grid (ILDG)



Organization:

- federation of autonomous “Regional Grids”
- forming a single Virtual Organization (VO)
- 2 Working Groups (metadata and middleware) + Board

Basic Concepts:

- ILDG defines standardized metadata schema, file-format, API [hpc.desy.de/ildg]
- Regional grids (with specific policies, technologies, resources, . . .) provide catalogue services + storage
E.g. LDG makes to a large extent also use of WLCG technology and services

Towards ILDG 2.0

Situation around 2020

- ✗ Usability of ILDG services had severely degraded
- ✗ ILDG had started 10 years before formulation of FAIR principles

Aims for ILDG 2.0

- Become fully FAIR-compliant
- Re-activate and organize regional grids
- Modernize concepts and basic gearbox



Critically relied on PUNCH4NFDI funding for a professional SW developer

LDG Resources and Services

Storage Elements

site	type / interf	legacy	tolerated*)	comment
INFN-CNAF	disk / StoRM	2 TB	0.1 PB	
DESY HH	tape / dCache	0 TB	1 PB	
DESY ZN	tape / dCache	70 TB	1 PB	(2026)
Jülich	tape / dCache	200 TB	1 PB	(per year)

*) no formal agreement at any site

- Metadata and File Catalogue
(operational concept at DESY ZN)
- Webpage (LDG and ILDG-wide)

- `Services.xml` — URL of all services
- “Simple listings” — read-only access to all catalogues
- VO Policy