WDML: some scenarios for operations, financial models

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Decoupling of roles: modularity

Content providers:

individual responsibility for continuity of services

Integrators and IT infrastructure providers:

• costs covered within their (wider) service commitments



Operational structure

Cloud concept

IT infrastructure delocalized:

few locations at partners offering enabling capacities for:

 storage, hardware
software (maintenance and development)
credible warranty of dependable availability and long(er)-term preservation



Integration and interoperability

WDML system associated with a broader service framework for science:

- functional interoperability
- integration of physical infrastructure



Legal solutions

EuDML business plan, March 5, 2012:

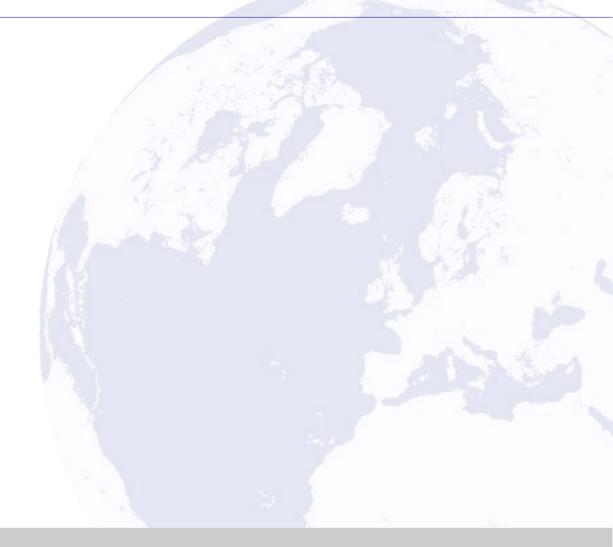
- a model of voluntary membership contributions is foreseen
- various members contribute various resources to the initiative, in a way that the collective contributions facilitate the continuous operations and further development of EuDML services



Global integrated IT platform for mathematical content

Novel participatory funding schemes:
costs shared among contributors

Future vision





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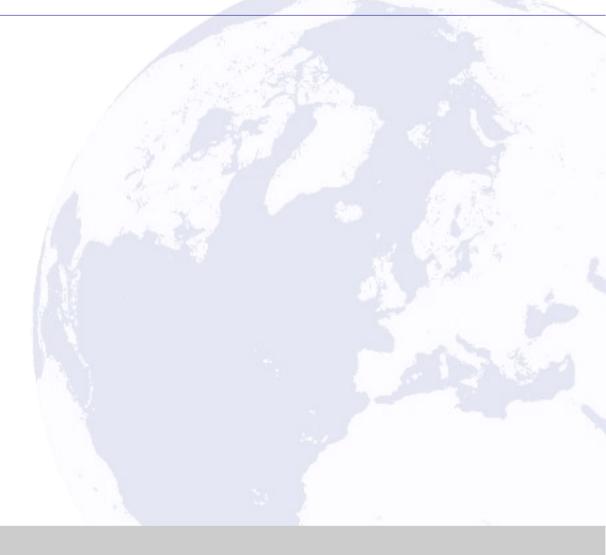


Possible short- and mid-term initiative

Constituting a community around infrastructure based on:

DRIVER international infrastructure and EuDML experience

This would enable WDML to offer a consistent and sustainable aggregation and federation of the DMLs over the world



What does it mean for WDML?

Suggestion applicable to the development of tools to be shared among the DMLs:

Such an initiative should not be limited to aggregation of individual collections, but offer: rich tools a future-proof development environment

infrastructural support to the involved parties (besides end-users)

and possibly offer DMLs hosting and long term preservation





Infrastructure open for diverse content

- · Open for grey literature
- Open for working papers and repositories
- Open for enhanced publications
- Promotion of new networked quality ensurance forms
- Participatory culture
- Fundamental role of proactive educational usage forms of the mathematical content



Some incentives and motivations:

Necessary fundamental contributions of mathematics to next-generation computing systems

Necessary contributions to big-data based science and technology

Mathematics everywhere

