

EOxServer

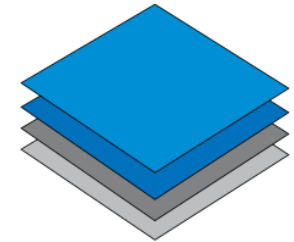
Web Coverage Service 2.0 MapServer Implementation Up-scaling & Benchmarking

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2013-01-23 HMA AWG Meeting

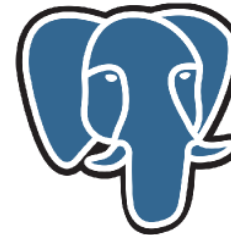
OpenSource Software Stack



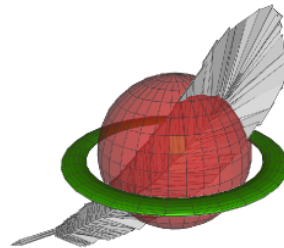
django



geodjango



PostgreSQL
the world's most advanced open source database



GEOS



EOxServer in Brief

- Latest EOxServer release is 0.2.3 from 2012-12-27
- MIT-style license and based on Open Source Software
- WCS, EO-WCS, WMS, EO-WMS, WCS-T
- Rectified- & ReferenceableGridCoverages
- DatasetSeries and StitchedMosaics
- Client for demonstrating integrated usage of EO-WMS & EO-WCS
- Admin app & Log viewer
- Command line tools: `create_instance`, `eoxs_add_dataset_series`, `eoxs_register_dataset`, `eoxs_synchronize`, `eoxs_delete`, ...
- Python Package Index (PyPI) & RPMs
- More details see HMA AWG presentation from June 2012¹

1: https://wiki.services.eoportal.org/tiki-download_wiki_attachment.php?attId=1735&page=HMA%20AWG%20Meeting%20no%202012%208%20June%202012&download=y

Up-scaling & Benchmarking

- Installation at ESA supporting the DREAM Project
- Benchmarking EOxServer – GeoServer

Installation at ESA supporting the DREAM Project

- Simulating a Product Facility / PDGS
- Hosted at ESA by O&M Team
- Installation ongoing
- Data made available simulating Sentinel-2 (see next slide)

Data for the DREAM project

Use Case	Data
Global Reference and Background Map	Spot 5 data set, ortho-rectified, UTM projected, RGB, JPEG2000, Europe gap-less cloud-free
	ENVISAT MERIS data set, ortho-rectified, UTM projected, RGB, JPEG2000, global gap-less cloud-free
Area of Interest	3x Spot 5 time-series, ortho-rectified, UTM projected, RGB, JPEG2000, ~ 50x50 km
	3x ENVISAT MERIS time-series, ortho-rectified, UTM projected, RGB, JPEG2000, ~ 300x300 km
Hotspot Analysis	3x ENVISAT MERIS time-series, ortho-rectified, UTM projected, RGB, JPEG2000, ~ 300x300 km

Benchmarking EOxServer – GeoServer

- Preparatory talks with DLR / Eumetsat
 - Eumetsat-EOX Meeting 2012-11-28
 - Proposal outline for a benchmark project by S. Kiemle at HMA Forum¹
- Possibly using same data as in DREAM above
- See also the following presentation by S. Giannecchini

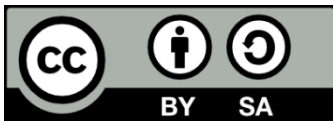
1: http://wiki.services.eoportal.org/tiki-view_forum_thread.php?comments_parentId=1438&topics_sort_mode=lastPost_desc&forumId=2

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