A platform to enhance satellite data

A new era of exploiting earth data with sobloo

Earth observation data is one of the key data sets for assessing the impacts of climate change.

However, there are many challenges for academic and research institutions in accessing, manipulating, and analyzing this data. Files are enormous and unwieldy, and data needs to be regularly updated to be optimally exploited.

With Copernicus, the European Union has an ambitious Earth observation program to understand environmental challenges better. Copernicus comprises 30 Sentinel satellites dedicated to Earth observation and a network of multiple sources, including ground stations, airborne and onboard sensors, and maritime beacons. These all feed a database coordinated by ESA (European Space Agency). This database provides indicators in six key areas: atmosphere, marine, agriculture, climate, emergencies, and security.

The program aims to exploit this complex data, creating new economic and research models from satellite images and system-generated data.

Pushing earth's observation further with sobloo

Access to the data is free, but the EU realized that it needed a customized environment to utilize it and gain valuable insight. A consortium led by Orange and Airbus created sobloo as a platform where you can access, store and process earth observation images. The cloud resources made available by Orange enables scientists, businesses and entrepreneurs to harness the power of the cloud to thrive in building new business models and develop software and applications based on Earth Observation Data. Sobloo provides business tools, APIs and connectors, cross references for data sources or AI required to manipulate the raw data within a single environment.

Built on an open community model

sobloo has been created as an open community and is primarily for research and exploitation of data, spatial images, and services. It can, however, also be used as a platform for application and service developers.

soobloo's infrastructure relies on Flexible Engine public cloud solution operated by Orange Business Services. Built on OpenStack, it is an open-source environment that enables rapid innovation, boosts scalability, eases regulatory compliance, and avoids vendor lock-in.

sobloo infrastructure-as-a-service integrated by Orange enables you to manage your virtual environment globally from an online console:

- Provides a scalable service
- Pay-per-use model allows you to manage budgets better
- Open APIs enable separate systems or apps to communicate and exchange data with one another
- Compliance with the latest standards
- Simplified application management with automated monitoring, alerting, and resiliency services
- Critical applications can be deployed across multiple data centers via a unified global infrastructure

orange™ Business Services

A smart elastic service

Through the innovative concept of sobloo, you can access a development environment that provides the flexibility, security, and performance of today's cloud technologies for academic and research scenarios.

The cloud resources made available by Orange will enable you to utilize the power of cloud to examine earth observation data and develop new applications and software.

Innovative services to exploit the potential of earth observation data

The main advantages of sobloo include:

1 An extensive catalog of data

2 An ecosystem of partners specializing in the analysis of terrestrial data

3 Open source tools and services to develop applications based on sobloo

4 Pooling of infrastructure and data storage costs

5 Efficient and secure public cloud via Orange Flexible Engine

6 Explicitly designed to make the earth's data mining more efficient

Designed for effective collaboration

The powerful sobloo collaborative model supported by cloud technologies has been designed to promote community collaboration, sharing, and co-creation and managed cloud-based generic services; it also offers thematic and analytic tools.

The solution is open to encourage expansion of the information base. External data sources can easily be added to the Copernicus data, including images from drones, mobile data indicators, or data from IoT sensors.

Tap into sobloo's marketplace

Visit sobloo's easy-to-use marketplace, which allows you to shop for different sources. Here all third parties working in the sobloo environment can publish their services, either free or commercially. All free data and services provided by sobloo are also available here.

Orange Flexible Engine: global, open, and secure

The world of academia needs a robust, secure, and scalable cloud infrastructure that meets the needs of researchers, faculty, and students. Orange Flexible Engine is optimized for educational use and is fully aligned with the OCRE Cloud Framework and is the ideal choice for GÉANT cloud now and into the future. In addition, you can take advantage of special discount programs for OCRE Cloud framework institutions.

Flexible Engine for the OCRE/GÉANT community offers a place to:

- Create pay-as-you-go virtual machines, including storage and computing resources

- Host your databases and critical applications

- Innovate directly in the cloud using containers, Big Data, Machine Learning, and Artificial Intelligence

- Utilize 24/7 support, introductory workshops and cloud coaches

Beyond an Earth observation data platform, sobloo is an open geospatial community. It has been created to adapt to all types of user profiles and offers different entry points. Users contribute to the continuous evolution of the sobloo platform. Don't delay, start today. You can find out more **here**.

Learn more about the Orange Flexible Engine offer for GÉANT members here https://ocre-orange cloud.com

Or contact us at ocre.orange@orange.com

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