

What is the OSDC?

We provide and support cloud computing and storage services for the scientific research community. The OSDC is run by the Open Cloud Consortium (OCC), a non-profit organization whose primary goal is to support scientific advances by working with researchers in a variety of disciplines

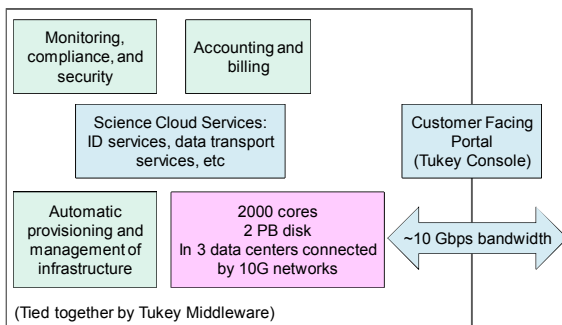
What is the OCC?

The Open Cloud Consortium (OCC) is a not for profit that manages and operates cloud computing infrastructure to support scientific, environmental, medical and health care research. We are focused on using this technology to make scientific advances by working with scientists in a variety of disciplines.

Why use the OSDC?

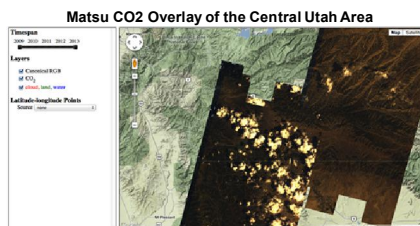
Our cloud services are based on the principles of openness and interoperability. The OSDC infrastructure is tailored towards the high performance storage and compute resources often required for scientific discovery. We view the OSDC as complementary to commercial cloud services available.

Overview of the OSDC



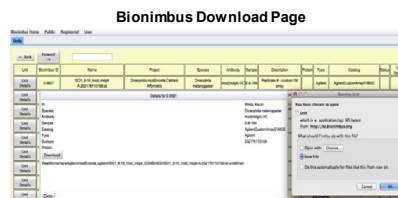
OSDC Projects

Matsu



Project Matsu is a collaboration between NASA and the Open Cloud Consortium to develop open source technology for cloud-based processing of satellite imagery to support the earth sciences.

Bionimbus



Bionimbus is a cloud-based infrastructure for managing, analyzing, archiving, and sharing large genomic databases. Bionimbus is used by a number of projects, including modENCODE, ENCODE, and the T2D-Genes consortia.

How can I get involved?

Individual researchers wishing to use the OSDC can do so by applying at:

<http://www.opensciencedatacloud.org/apply/>

Organizations and research groups may benefit from becoming OCC members. More information can be found at:

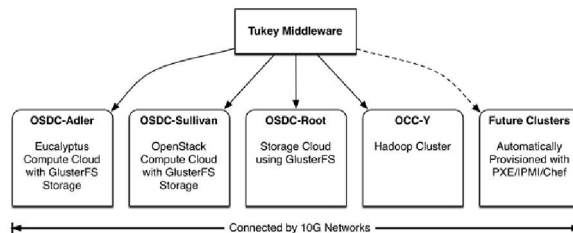
<http://opencloudconsortium.org/about/>

The OSDC PIRE project provides international research and education experiences through training and study at universities and research institutes around the world with leading scientists in the field of computing. More information can be found at:

<http://news.opensciencedatacloud.org/pire-training/>

OSDC Resources and Services

We currently operate compute and storage clouds and a shared Hadoop cluster as depicted below:



Tukey

We have developed a software stack called Tukey that provides the link between the users and services provided by the OSDC. From the user's perspective they log into the Tukey Console (a web application) and have access to the services provided. This is accomplished by middleware that authorizing users and performing API translations between various cloud software stacks.

Public Data

The OSDC hosts a local mirror of 1 PB of publically available datasets. Data is easily accessible from within OSDC provided cloud services. The data can also be freely downloaded using rsync or UDR. A few examples of data available include: 1000 Genomes Project, City of Chicago Public Data, Earth Observing-1 Mission, Enron Emails, and Sloan Digital Sky Survey.

More Information

Main OSDC Site:
<http://www.opensciencedatacloud.org/>

Main OCC Site:
<http://www.opencloudconsortium.org/>

Matsu:
<http://matsu.opensciencedatacloud.org/>

Bionimbus:
<http://bionimbus.opensciencedatacloud.org/>

Other OSDC Projects:
<http://www.opensciencedatacloud.org/projects/>

Sponsors

