

HELIX NEBULA THE SCIENCE CLOUD

Cloudscape V – Cloud for savings, Cloud for quality

Helix Nebula in the spotlight:
27 February 2013 (16:15 – 16:30 CET)

Helix Nebula – Selected by HPC In the Cloud as a Top Cloud Story 2012

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Big SCIENCE teams up with big BUSINESS

Supporting the **massive IT requirements** of scientists and **creating an open market place** for Science in **Europe**.

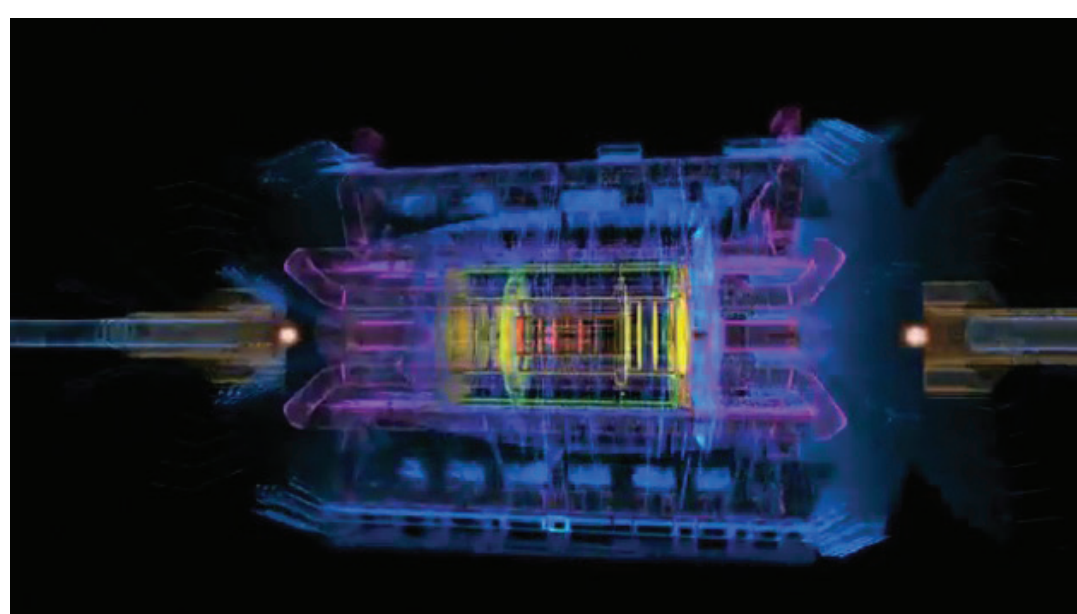
About Helix Nebula

Initially based on the needs of European IT-intense scientific research organisations, Helix Nebula aims to pave the way for the **development and exploitation of a Cloud Computing Infrastructure**. Ultimately, Helix Nebula will enable the inclusion of other stakeholder needs (governments, businesses and citizens).

Strategic goals

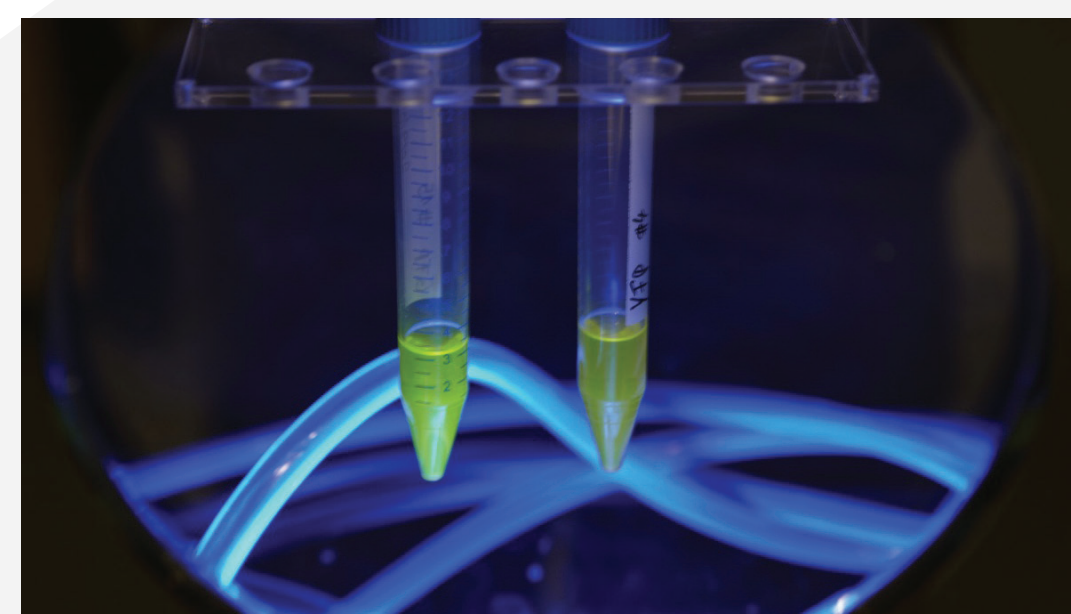
- * Set up a cloud computing infrastructure for the European Research Area
- * Identify and adopt policies for trust, security and privacy at the European-level
- * Create a light-weight governance structure involving all stakeholders
- * Define a short and medium term funding scheme

ATLAS High Energy Physics Cloud Use



To support the computing capacity needs for the ATLAS experiment

Genomic Assembly in the Cloud



A new service to simplify large scale genome analysis; for a deeper insight into evolution and biodiversity

SuperSites Exploitation Platform



To create an Earth Observation platform, focusing on earthquake and volcano research

The Partnership



Atos

CloudSigma

cnes
CENTRE NATIONAL D'ETUDES SPATIALES

INM
Istituto per il Rilevamento
elettromagnetico
dell'ambiente
National Research Council of Italy

CSA
cloud security
alliance™

DANTE
www.dante.net

DLR

egi

interoute
from the ground to the cloud

logica
be brilliant together

SAP

sixsq

SWITCH

••T••Systems•

terrae 20

the SERVER
LABS
the IT architects

CERN, EMBL and ESA succeeded in deploying scientific applications each involving tens of thousands of jobs running at data centres operated by the Helix Nebula Service Providers

The New Flagship Use Cases

Helix Nebula is seeking wider participation. Find out how to become a member

www.helix-nebula.eu/index.php/home/become-a-new-member



Adopters

AWST

Capgemini
CONSULTING TECHNOLOGY OUTSOURCING

CNRS

CECMWF

Ifremer

OpenNebula.org
The Open Source Model for Cloud Computing

orange
Business Services

THALES

Telefonica

Trust-IT Services Ltd
Communicating ICT to markets

The Blue Box



The Blue Box is the core of Helix Nebula. It is a Service Enabling Framework, a complex component providing API services and Web Portal that will enable users to interact in a central and transparent manner with all the Cloud Providers. Find out more here www.helix-nebula.eu/index.php/uploads/file/81/33/HelixNebulaArchitecture.pdf.html

The Timeline

Endorse the common strategy,
Agree on the Partnership,
Select flagships use cases,
Define governance model

Pilot Phase, Deploy
flagships, Analysis of
functionality, performance
& financial model

Towards an open market
place for Science

2011

2012-2013

2014

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