

HELIX NEBULA Initiative

HELIX NEBULA The Science Cloud

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Helix Nebula Initiative (HNI)

- ☛ Founded five years ago
- ☛ More than 40 service providers, research organisations, data providers, publicly-funded e-infrastructures
- ☛ Developed a hybrid cloud model
 - ☛ Includes procurement and governance components
- ☛ More info: <http://www.helix-nebula.eu/>

HELIX NEBULA The Science Cloud

- Procurers: CERN, CNRS, DESY, EMBL-EBI, ESRF, IFAE, INFN, KIT, SURFSara, STFC
 - Experts: Trust-IT & EGI.eu
 - Procurers have committed funds (>1.6M€), manpower, use-cases with applications & data, in-house IT resources
- Objective: procure innovative IaaS level cloud services
 - Fully and seamlessly integrating commercial cloud (IaaS) resources with in-house resources and European e-Infrastructures
 - To form a hybrid cloud platform for science
- Services will be made available to end-users from many research communities: High-energy physics, astronomy, life sciences, neutron/photon sciences, long tail of science
- Co-funded via H2020 (Jan'16-Jun'18) as a Pre-Commercial Procurement (PCP) project: Grant Agreement 687614, total procurement volume: >5M€

HNSciCloud – Challenges

☞ Compute

- ☞ Mostly HTC, integrating some HPC requirements

☞ Storage

- ☞ Caching at provider's site, if possible automatically (avoid managed storage)

☞ Network

- ☞ Connection via GÉANT
- ☞ Support of identity federation (eduGAIN) for IT managers

☞ Procurement

- ☞ Match of cloud providers' business model with public procurement rules

HNSciCloud – Current Status

- Official start of project: Jan 2016, duration: 30 months
- Tender announced in Jan 2016
- 17-Mar-2016: Open market consultation
- 21-Jul-2016: Tender issued (> 200 downloads, > 70 requests for clarification)
- 07-Sep-2016: Tender information day – design phase
- 19-Sep-2016: Deadline for tender replies
 - Sufficient number of valid tenders received
 - Evaluation by administrative and technical experts
- 07-Oct-2016: Award decision, contracts
 - Consortia led by T-Systems; IBM; RHEA; INDRA
- 02-Nov-2016: Kick-off meeting with Phase 1 contractors

HNSciCloud – Contacts



- ☛ Interested?
 - ☛ See <http://www.hnscicloud.eu/>
 - ☛ Subscribe to hnscicloud-announce@cern.ch