1st SIG-CISS meeting

25-26 September, 2017

Amsterdam, Netherlands

The GÉANT SIG-CISS (Cloudy Interoperable Software Stacks) is proposed to be the successor of the long running TF-Storage task force of GÉANT with a wider scope extending from data storage to general cloud infrastructure software stacks, platforms and research workflows. The SIG brings together those who are building/operating R&E clouds and are willing to share strategy, design, deployment, performance optimization, application integration, interoperability, security and other related information, knowledge and best practices as well as participate in joint efforts aimed at addressing needs of academic environment related to building, operating, brokering cloud services and infrastructure and ensuring their interoperability.

The first meeting of SIG-CISS was hosted by SURFsara in Amsterdam, The Netherlands. The meeting was back to back with the second ORC congress.

The Second International Open Research Cloud Congress will take place in Amsterdam, from 27 to 29 of September and will continue an open dialogue between research communities, policy agencies and industry about the need for international cooperation of private and public clouds supporting scientific research.

The inaugural International Open Research Cloud Congress, held on 11 to 12 of May 2017 in Boston, kicked off the drafting of an open research cloud declaration that describes the conventions that the community is prepared to adopt and support for enabling international scientific research computing on clouds. This second edition will continue the effort to reach the consensus of delivering a final declaration.

Notes and actions

DRAFT (working) vision statement of SIG-CISS:

Global research and scientific workflows (simple and complex) are seamlessly executed on multi-stakeholder federated cloud infrastructures built on harmonised software stacks and widely accepted rich interfaces for applications.

Action item	Comments
1.1 - Investigate the technical, economic and organizational/political possibility of offering coordinated cross-border storage services including storage space swap deals e.g., for data backup/DR/replication and long-term protection based on S3 or other standard interfaces. *Assigned to: Maciej Brzezniak, Guido Aben, Simon Leinen*	On the agenda of the next meeting https://geant.box.com/s/rqrzn2iqaon54i4bscbb0daac8mwvp6q See Action 2.3. from the 2nd SIG-CISS meeting.
1.2 - Agree on the basic principles for collectively offering OS images, define, share and maintain a finite set of images as community standard. *Assigned to: Kalle Happonen, Simon Leinen*	Kalle (CSC) shared: https://github.com/CSCfi/CloudImageRecommendations Enol (EGI) posted: https://wiki.egi.eu/wiki/Federated_Cloud_Virtual_Machine_Image_Preparation
1.3 - Build a reference proxy/gateway implementation of the agreed OpenCloudMesh (OCM) federated sharing protocol specification to support the on-boarding of closed-source EFSS solutions as well as the compliance of the current open-source products. *Assigned to: Peter Szegedi, Guido Aben, Jakub Moscicki, Maciej Brzezniak,*	Refer to the OCM pilot Phase IV Open Cloud Mesh Peter to discuss the idea with the GÉANT Community Committee on 24 October. On the agenda of the next meeting...
1.4 - write a position statement about value-added cloud service level specification for multi-disciplinary scientific applications i.e. above the simple VM and/or block storage level but below the domain specific applications/workflows' needs. *Assigned to: Guido Aben*	Report at the next meeting. Showing use cases... Engage with Glenna2 Project... Saverio (SWITCH) posted about the OpenStack Passport Programme http://lists.openstack.org/pipermail/user-committee/2017-September/002364.html

Some notes were taken by Emir Imamagic (SRCE)

Very much appreciated: SIG-CISSmeeting_Amsterdam_September2017.pdf

Presentations

List of attendees...

Agenda

Monday, 25 September 2017

Time	Agenda items	
12.00 - 13.00	**Arrivals, Light lunch...**	
13.00 - 13.15	**Welcome by the SIG-CISS steering committee and the local organizers** *Paco Bernabé - SURFsara* *Simon Leinen - SWITCH, Guido Aben - AARNet, Maciej Brzezniak - PSNC*	Setting the scene
13.15 - 13.30	**Introduction to SIG-CISS, motivations and objectives** *Guido Aben - AARNet*	
13.30 - 14.30	**Who we are together... How we organize...** • ***OpenStack Operator (OSO)*** *- Paco Bernabé - SURFsara* • ***former TF-Storage*** *- Maciej Brzezniak - PSNC - slides on PSNC's box* • ***Open Research Cloud (ORC)*** *- Simon Leinen - SWITCH - slides* • ***Cloud Services for Synchronization and Sharing (CS3)*** *- Jakub Moscicki - CERN (remote) - http://cs3.cyfronet.pl* • ***OpenCloudMesh (OCM) Project*** *- Peter Szegedi (GÉANT)*	
14.30 - 15.00	**Coffee Break**	
15.00 - 15.01	*Fairbanks B.V. - very much interested but presenting in the US.* *OpenStack.org - very much interested but busy with their internal all-hands event.*	"Industry talks"
15.01- 17.00	**OpenStack - latest updates and issues** • ***Managing OS images—possible joint work*** *- Simon Leinen - SWITCH - slides* • ***Delegated administration, reporting/show-back to institutions*** *- TBC* • ***Cloudification of a Grid cluster*** *- Paco Bernabé - SURFsara*	OpenStack Operators
17.00 - 18.00	**Round table discussion** *Chaired by the Steering Committee members* *Organizations and individuals represented at the meeting will be given the opportunity to bring up any technical topics or issues relevant to their businesses and reflect on the SIG-CISS forum discussions.*	Free format un-conference

Social dinner...

Tuesday, 26 September 2017

Time	Agenda items	
09.00 - 10.00	**Container orchestration tools** • ***Kubernetes on OpenStack - demonstration*** *- Saverio Proto - SWITCH - slides* • ***Glenna2 metaorchestration (ubernetes)*** *- Gurvinder Singh - UNINETT (remote)*	OpenStack Operators

10.00 - 10.30	**Automation tools** • ***Ansible*** *- Paco Bernabé - SURFsara* • ***Using MAAS with JuJu*** *- Fulvio Galeazzi - GARR - slides*	
10.30 - 11.00	**Coffee Break**	
11.00 - 11.15	**Brief overview on the EOSC pilot** Christos Kanellopoulos - GÉANT (remote)	Setting the scene

11.15 - 13.00	**Swift, Ceph - Object Storage and ScaleIO for Block devices**
	• ***Swift cluster at SURFsara*** *- Ron Trompert - SURFsara*
	• ***Ceph in the GRNET cloud stack*** *- Nikos Kormpakis - GRNET - slides*
	• *Review of hardware platforms for Ceph - Maciej Brzezniak - PSNC - slides: SIG-CISS-server-platforms-review.pdf*
	• *ScaleIO intro - high performance block from EMC (ScaleIO) - Maciej Brzezniak - PSNC*
	  ◦ *ScaleIO_vs_Ceph.pdf*
	  ◦ *scaleio-301-technical-deep-dive_selected.pdf*
	• *ScaleIO at REDIRIS - Antonio Fuentes Bermejo - REDIRIS - ScaleIO_at_rediris.pdf*
	• ***Modern data center (network) fabrics, L3/whitebox, SDN solutions*** *- Saverio Proto - SWITCH*
		Storage topics

13.00 - 14.00	**Lunch**	
14.00 - 14.30	**OpenStack vs. OpenNebula** ***Open discussion: User experience, e.g. alternatives to Horizon...***	Free format
14.30 - 15.30	***Research workflows*** *Open discussion chaired by Guido Aben - AARNet*	
15.30 - 16.00	**Closing, next meeting, AoB...** *Peter Szegedi - GÉANT*	
	Departures....	

Location

CWI
Science Park 123
1098 XG Amsterdam
+31 20 592 9333
www.cwi.nl

The badges can be picked up at the reception of SURFsara (**Science Park 140)** and once people arrived there, they will be told where the room is.

Travel information to Amsterdam Science Park

- From Amsterdam Central Station: Train to station "Amsterdam Science Park" (four train connections per hour, 8 minutes of travel time).
- From train station Amsterdam-Amstel or Muiderpoort station: Take bus 40 to Science Park Amsterdam. The bus stop closest to the meeting location is called "Science Park Aqua".
- From Amsterdam Airport (Schiphol): A convenient direct train connection (30 minutes of travel time) is operated for transportation from the Schiphol airport to the Amsterdam Science Park train station on campus. Two trains per hour.
- For finding your way by public transport from any place in Amsterdam or the Netherlands you can use the Journey Planner.
- Travel by bus and tram in and around Amsterdam is only possible using the OV-chipkaart. You can find information here. You can buy a disposable OV-chipkaart for one trip or for a predetermined short-term use. You can find additional information here.