





Meeting:	Task Force Federated Clouds	
Date and Time:	Tuesday 25 Oct 2011 - 11:00-12:05 CET	
Venue:	Conference Call via HiDef	
Agenda:	https://www.egi.eu/indico/event/589	
PARTICIPANTS		2
APOLOGIES		2
AGENDA BASHING		3
MINUTES OF THE PREVIOUS MEETING		3
ACTIONS REVIEW		3
ITEMS OF BUSINESS		7
POLICY ISSUES IN FEDERATED CLOUDS WRAP-UP		7
AGREEMENT ON AA TECHNOLOGY FOR CLOUD PROVIDERS		7
AGREEMENT ON AA TECHNOLOGY AND POLICY FOR VM AC	CCESS	7
AGREEMENT ON VO SUPPORT		7
RESOURCE AVAILABILITY ACCESS POLICIES		7
WORK GROUP SCENARIO 1 PROGRESS REPORT		7
ROUND TABLE REPORTS		7
STANDARDISED INTERFACES FOR VM MANAGEMENT		8
WORK GROUP SCENARIO 2 REPORT & PLANNING		9
AOB		9
CLOUDSIGMA AS GRID NEWCOMER		9
INTEGRATED INFORMATION SYSTEMS WORKSHOP - REQUES	ST FOR INPUT	9
ACTIONS		10







# **Participants**

Name and Surname	Abbr.	Representing	Function
Matteo Turilli	MTu	Oxford University	Task Force Chair
Steve Brewer	SBr	EGI.eu	Chief Community Officer
Michel Drescher	MDr	EGI.eu	Technology Manager
Tomasz Szepieniec	TSz	CYFRONET	Resource Provider
Marco Verlato	MVe	WeNMR	User Community
Bjoern Hagemeier	ВНа	FZ Juelich	Resource Provider
Shahbaz Memon	SMe	FZ Juelich	Resource Provider
Giacinto Donvito	GDo	IGI	Resource Provider
Alison Packer	APa	STFC (UKngi)	Resource Provider
Zeeshan Ali Shah	ZAS	КТН	Resource Provider, Technology Provider
Alexander Papaspyrou	APu	OGF DCIFed	OGF DCIFed Co-Chair
Micheal Higgins	MHi	CloudSigma	Resource Provider
David Wallom	DWa	Oxford University	Resource Provider

# **Apologies**

Name and Surname	Abbr.	Representing	Function
Tiziana Ferrari	TFe	EGI.eu	Chief Operations Officer
Peter Solagna	PSo	EGI.eu	Operations Officer
Miroslav Ruda	MRu	CESNET	Resource Provider
Daniele Cesini	DCe	EGI-InSPIRE JRA1	Technology Provider
Carl Loomis	CLo	StratusLab	Technology Provider







# **AGENDA BASHING**

There were no changes to the proposed agenda.

# MINUTES OF THE PREVIOUS MEETING

The minutes of the previous meeting (18 October 2011) are publically available in MS Word and Adobe PDF format, and are accessible at: https://www.egi.eu/indico/event/588.

Accepted without modifications.

# **ACTIONS REVIEW**

Please note that the actions are now managed with the help of the to-dos lists at the following Basecamp website: <a href="https://oerc.basecamphq.com/">https://oerc.basecamphq.com/</a>.

ID	Resp.	Description	Status
02/01	SBr	Provide initial documentation on User Community requirements and needs that may be used as use cases for a federated cloud infrastructure	<del>OPEN</del> CLOSED
		13 Sep 2011: In progress, the received answers need to be collated. 27 Sep 2011: No progress	
		<u>04 Oct 2011:</u> No progress.	
		<u>11 Oct 2011</u> : No progress	
		<u>18 Oct 2011</u> : No progress	
		<u>25 Oct 2011</u> : Starting with the implementation of Scenario 1 we are in a better place to disseminate to user communities; action formally closed but kept running as a background activity	
08/02	FSI/MBo	Fill in the inventory matrix (SARA) provided through Action 03/02	OPEN
		27 Sep 2011: No progress	
		<u>04 Oct 2011:</u> No progress, but was promised offline for this week.	
		11 Oct 2011: No progress; Matteo to follow-up (Action 01/05)	
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
02/03	GSi/SBr	Provide an introduction on the WIKI about the stakeholders,	OPEN







		actors and terminology used in this Task Force	
		<u>04 Oct 2011:</u> No progress	
		<u>11 Oct 2011:</u> No progress	
		<u>18 Oct 2011:</u> No progress	
		<u>25 Oct 2011:</u> No progress; SB adds his responsibility to contribute but requires the review of TF members before publication on the Wiki.	
03/03	MDr	Provide an overview of the six scenarios in the Wiki including Scenario leaders and scenario complexity.	OPEN
		<u>04 Oct 2011:</u> No progress	
		<u>11 Oct 2011:</u> No progress	
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
05/03	RYa	Fill in the inventory matrix (GWDG) provided through Action 03/02	OPEN CLOSED
		<u>04 Oct 2011:</u> No progress	
		11 Oct 2011: No progress	
		18 Oct 2011: No progress	
		25 Oct 2011: The information was provided in the Wiki.	
01/04	MTu	Contact umbrella activities mentioned in Action 11/01 and negotiate participation in the Task Force	OPEN
		11 Oct 2011: On-going, no results yet	
		18 Oct 2011: On-going, no results yet	
		25 Oct 2011: Activities were contacted, but no answers yet.	
02/04	DCe	Provide contact details to MT and MD to add technical experts for monitoring into the Task Force	OPEN CLOSED
		<u>11 Oct 2011:</u> Has identified staff, needs discussion on a JRA1 conference call next week	
		<u>18 Oct 2011:</u> No progress	
		<u>25 Oct 2011:</u> Contacts identified and confirmed; mail sent to Matteo and Michel	
03/04	MDr	Contact Task Force representatives for accurate affiliation information and deputies (where required).	<del>OPEN</del> CLOSED
		<u>11 Oct 2011:</u> No progress	







		18 Oct 2011: No progress	
		25 Oct 2011: No progress; Agreement to turn this into an obligation.	
04/04	ZAS	Iterate on the conference call topic "Security audit": What does it mean, what does it entail, and what is the scope for the Task Force?	OPEN CLOSED
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: Discussed on the mailing list; and documented in the Wiki.	
01/05	MTu	Follow-up with SARA to fill in the inventory matrix	OPEN
		18 Oct 2011: Mail sent; no answer	
		25 Oct 2011: In progress, SARA didn't fill in the inventory yet.	
02/05	MTu	Record Eucalyptus stability and coverage issues in the blueprint.	OPEN
		18 Oct 2011: No progress	
		25 Oct 2011: No progress	
03/05	DOC	Report about the issues about policy and non-technical issues that do not allow TCD to make user accounts available to users.	OPEN
		<u>18 Oct 2011:</u> No progress	
		<u>25 Oct 2011:</u> No progress	
04/05	ZAS	Document the issues around IPv4 and IPv6 in the Wiki	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: Documentation is in internal review with experts	
05/05	CLo	Evaluate and document StratusLab status for IPv6 support	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
06/05	DCe	Evaluate and document EGI-InSPIRE JRA1 status for IPv6 support	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: In progress	
07/05	FSI/MVe	Document the WeNMR Cloud usage framework across multiple Cloud providers in the Task Force Wiki.	<del>OPEN</del> CLOSED
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: The information was provided in the Wiki	
08/05	МНі	Start collecting inventories and capabilities of resource providers	<del>OPEN</del>







		around Hypervisor capabilities, VLAN issues and IP address obstacles, etc.  18 Oct 2011: No progress  25 Oct 2011: Started to collect information via Wiki and mailing list	CLOSED
09/05	MVe	Document data movement and access requirements of WeNMR for their use of Clouds.  18 Oct 2011: No progress  25 Oct 2011: The information was provided in the Wiki	<del>OPEN</del> CLOSED
01/06	MTu	Open a thread on the mailing list kick-starting the discussion around merits and limitations of OCCI.  25 Oct 2011: Started on the mailing list.	NEW CLOSED
02/06	ZAS	Add four columns to a table in the wiki site for the providers to specify what management interface APIs and AA technologies they support and what APIs and AA technologies they plan to support in the future.  25 Oct 2011: Done.	<del>NEW</del> CLOSED
03/06	МНі	Merge the circulated spreadsheet into the wiki website.  25 Oct 2011: No progress	<del>NEW</del> OPEN
04/06	MTu	Security audit: Record the reached agreement in the blue print document.  25 Oct 2011: Done.	<del>NEW</del> CLOSED
05/06	MTu	Open a thread on the mailing list to kick-start the discussion about VM upload scenarios.  25 Oct 2011: Done.	<del>NEW</del> CLOSED
06/06	MTu	Answer to Tiziana request about providing a list of requirements for a service registry.  25 Oct 2011: Done.	<del>NEW</del> CLOSED
07/06	MDr	To circulate the poll for the F2F meeting.  25 Oct 2011: Done.	<del>NEW</del> CLOSED







# **ITEMS OF BUSINESS**

# Policy issues in Federated Clouds wrap-up

### Agreement on AA technology for Cloud providers

Currently most or all providers support username/password credentials, while some support X.509 certificates for user authentication.

The consensus is that, in the near future, the EGI Cloud Federation will use X.509 certificates as federated identity mechanism to access the Cloud infrastructure services provided by Cloud providers. (see Action 01/07).

The EGI Repository for EGI Trust Anchor will be used for that purpose (see Action 02/07).

Cloud providers that use OpenNebula shouldn't run into problems as OpenNebula supports this already. Cloud providers using other VM Management software will have to seek support from their Technology Provider.

CloudSigma, as commercial provider, states that this may become an issue when integrating commercial Cloud providers, as there is little to no commercial drive to provide X.509 based authentication (see Action 03/07).

# Agreement on AA technology and policy for VM access

It is the consensus that AAI technology within VM instances (e.g. SSH access to the VM instance) is entirely within the remit of the VM provider/user, and out of scope for this Task Force or any Cloud provider.

No action is required on the Task Force's side. Cloud providers may have to accommodate user requirements depending on the provider's internal network setup and layout.

### Agreement on VO support

No further discussion on VO support.

# Resource availability access policies

Item was not discussed.

# Work group scenario 1 progress report

## Round table reports

#### F7 I·

Still probems setting up the Cloud infrastructure; issues indicate this being an problem of OpenSUuSE's integration of OpenStack. Will try alternative Linux Distributions to see whether that solves the issues. If all goes well users should be able to start using FZJ's Cloud by the end of the week.

#### **CESNET:**

No call participant.

#### CloudSigma:

Finished disabling the billing function for a specific set of trial accounts. The Task Force-specific process was circulated via Email to the mailing list (see Action 04/07).







### **Cyfronet:**

Cloud administrators confirmed that for test-bed users an affiliation with PL-Grid is not necessary, so that users may enrol within the week (see Action 05/07).

#### **GWDG:**

No call participant.

#### Oxford:

Still in the process of deploying OpenStack on the Oxford cloud; expects one moth still until users may use their cloud.

#### SARA:

No call participant.

#### TCD:

No call participant.

#### KTH:

Users have applied for accounts; provisioning of accounts finished, but no activity seen on the KTH Cloud yet (see Action 06/07).

#### INFN:

Expects their WNoDeS infrastructure ready for user enrolment by the beginning of next week. As a very new Resource Provider INFN has to update the resource inventory Wiki (see Action 07/07).

### WeNMR:

No clear picture of actual Cloud usage. WeNMR would want to upload own images; call participants perceive this as out of scope for Scenario 1, which deals with VM Management, interface issues, and not running specific user services.

Call participants discuss how to solve this issue. Discussions touched the provisioning of a very simple "Hello World" or "Echo Server" service to provision VM images for WeNMR to use without further delay. Many Cloud providers (e.g. CloudSigma, KTH) already provide base images that users may use to install their own software on. The group eventually reaches consensus that provider base images should be used to provision user specific software to start (see Action 08/07).

# Standardised interfaces for VM Management

Further discussions revolve around the specific goals of Scenario 1 and standard interfaces that should be provided on the API level. All Cloud providers report the availability of technology-specific APIs, and the majority report the availability of an OCCI interface.

Two interfaces emerge from the discussion: OCCI and Jcloud. Participants raise the concern that mandating a specific Cloud Management interface such as OCCI, Cloud providers may be limited in which functionality they may offer to their users. MD states that SDO-governed standards are paramount for the success of the Task Force (and the Cloud Federation), but underscores the fact that additional functionality that goes beyond any chosen standard offers two solutions that may be pursued in parallel:

- Provide this "missing" functionality in a proprietary way
- Describe this gap as a need to be taken to the respective SDO (e.g. OGF for OCCI).







MD further points out that such a gap analysis and submission to SDOs perfectly lies within the remit of the Task Force and that corresponding liaison contacts for SIENA and OGF (here: DCIFed Working Group) are included in the Task Force for exactly that reason (see Action 08/07).

# Work group scenario 2 report & planning

MH guides the discussion concerning standards to move data into and out of Virtual Machines. The participants discuss and agree that further discussion is required to clarify which issues and requirements concerning data movement need to be addressed; DW adds that it is important to talk to the user communities who will come up with requirements for the Task Force to solve.

The participants continue discussing how to start capturing requirements from user communities for a federated Cloud. SB volunteered to take initiative on starting this process and collect the requirements on the Task Force Wiki. (see Action 09/07).

### **AOB**

### CloudSigma as Grid newcomer

MH points out that CloudSigma is new to the "Grid business" hence has trouble at times understanding language, concepts and architecture used in Grids. SB and the UCST volunteer to take care of this (no specific action assigned).

# **Integrated Information Systems workshop - request for input**

MD initiates the discussion to contribute the Task Forces requirements for an integrated Information Discovery system. The participants agree that the Task Force should take initiative here (see Actions 10/07 and 11/07).







# **ACTIONS**

ID	Resp.	Description	Status
08/02	FSI/MBo	Fill in the inventory matrix (SARA) provided through Action 03/02	OPEN
		<u>27 Sep 2011:</u> No progress	
		<u>04 Oct 2011:</u> No progress, but was promised offline for this week.	
		11 Oct 2011: No progress; Matteo to follow-up (Action 01/05)	
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
02/03	GSi/SBr	Provide an introduction on the WIKI about the stakeholders, actors and terminology used in this Task Force	OPEN
		<u>04 Oct 2011:</u> No progress	
		<u>11 Oct 2011:</u> No progress	
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress; SB adds his responsibility to contribute but requires the review of TF members before publication on the Wiki.	
03/03	MDr	Provide an overview of the six scenarios in the Wiki including Scenario leaders and scenario complexity.	OPEN
		<u>04 Oct 2011:</u> No progress	
		<u>11 Oct 2011:</u> No progress	
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
01/04	MTu	Contact umbrella activities mentioned in Action 11/01 and negotiate participation in the Task Force	OPEN
		11 Oct 2011: On-going, no results yet	
		18 Oct 2011: On-going, no results yet	
		25 Oct 2011: Activities were contacted, but no answers yet.	
01/05	MTu	Follow-up with SARA to fill in the inventory matrix	OPEN
		18 Oct 2011: Mail sent; no answer	
		25 Oct 2011: In progress, SARA didn't fill in the inventory yet.	
02/05	MTu	Record Eucalyptus stability and coverage issues in the blueprint.	OPEN







		<u>18 Oct 2011:</u> No progress	
		<u>25 Oct 2011:</u> No progress	
03/05	DOC	Report about the issues about policy and non-technical issues that do not allow TCD to make user accounts available to users.	OPEN
		18 Oct 2011: No progress	
		25 Oct 2011: No progress	
04/05	ZAS	Document the issues around IPv4 and IPv6 in the Wiki	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: Documentation is in internal review with experts	
05/05	CLo	Evaluate and document StratusLab status for IPv6 support	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: No progress	
06/05	DCe	Evaluate and document EGI-InSPIRE JRA1 status for IPv6 support	OPEN
		<u>18 Oct 2011:</u> No progress	
		25 Oct 2011: In progress	
03/06	МНі	Merge the circulated spreadsheet into the wiki website.	NEW
		25 Oct 2011: No progress	OPEN
01/07	MDr	Develop roadmap for X.509-based federated identity for Cloud infrastructure access.	NEW
02/07	MDr	Provide links to the EGI Trust Anchor repository.	NEW
03/07	МНі	Document issues around using X.509 based AuthN for Cloud infrastructure access. Include suggestions for mitigation for user communities.	NEW
04/07	MVe	Remind WeNMR users to enroll ASAP with CloudSigma	NEW
05/07	MVe	Remind WeNMR users to enroll ASAP with Cyfronet	NEW
06/07	MVe	Ensure that users actually use the KTH Cloud	NEW
07/07	GDo/PVe	Update the resource inventory Wiki for INFN as Resource Provider	NEW
08/07	ZAS/MHi	Compare JCloud and OCCI, and document the gap analysis for a submission to OGF's OCCI WG for further consideration and standardisaion.	NEW
09/07	SBr/UCST	Start a user community orientated Wiki to start capturing specific requirements related to the six scenarios	NEW
10/07	MDr	Start rearranging the Wiki so that it better suit the capturing and digesting requirements, both from provider and user community	NEW







NEW

point of views.

**11/07** MDr

Start collecting information as input and contribution to the

Information System workshop.







Minutes prepared by

Michel Drescher, 6 September 2011

Minutes Approved

Task Force Chair Matteo Turilli

# **COPYRIGHT NOTICE**

Copyright © EGI.eu. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, visit <a href="http://creativecommons.org/licenses/by-nc/3.0/">http://creativecommons.org/licenses/by-nc/3.0/</a> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.

The work must be attributed by attaching the following reference to the copied elements: "Copyright © EGI.eu (www.egi.eu). Using this document in a way and/or for purposes not foreseen in the license, requires the prior written permission of the copyright holders. The information contained in this document represents the views of the copyright holders as of the date such views are published.