

OMB:Ibergrid-QR14

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Quarterly Report Number	NGI Name	Partner Name	Author
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1. MEETINGS AND DISSEMINATION

Note: Complete the tables below by adding as many rows as needed.

1.1. CONFERENCES/WORKSHOPS ORGANISED

Date	Location	Title	Participants	Outcome (Short report & Indico URL)
17 Sep 2013	Madrid, Spain	New developments in WLCG for Run2	M. Salichos, G. Donvito, P. Saiz, J. Flix and J. Pina	A workshop within the EGI Tehcnical Forum celebrated in Madrid from 16-20 September 2013. The link to the session, chaired by J. Flix and M. Delfino, is available in: [1]
19-20 Sep 2013	Madrid, Spain	IBERGRID 2013, 7th Iberian Grid Infrastructure Conference	(~50)	The 2013 IBERGRID conference was organized by IBERGRID (ES-NGI and PT-NGI), in Madrid and co-located with the EGI Technical Forum 2013. The main topics of IBERGRID 2013 Conference were: Infrastructures, Services and Operations, Innovation in the provision of IT services: virtualization and cloud computing, Data Management and Storage Systems, IT Management and Green Computing, EGI and WLCG Grid Computing Activities, Achievements of e-Infrastructure projects, Community Oriented Services, User and Applications and Technology Transfer to Society. This is the annual meeting gathering IBERGRID operators and user communities to reassess the past activities, debate problems and define joint strategies. Conference URL: http://www.ibergrid.eu/2013/

1.2. OTHER CONFERENCES/WORKSHOPS ATTENDED

Date	Location	Title	Participants	Outcome (Short report & Indico URL)
11-13 Sep 2013	Salamanca, Spain	HAIS	1	Conference Programe URL: http://hais13.usal.es/ <ul style="list-style-type: none"> • CIEMAT <ol style="list-style-type: none"> 1. Miguel Cárdenas Montes et al, Metaoptimization of Differential Evolution by Using Productions of Low-Number of Cycles: the Fitting of Rotation Curves of Spiral Galaxies as Case Study, [2]

16-20 Sep 2013	Madrid, Spain	EGI Technical Forum 2013	(~50)	<p>Conference Programme URL: http://tf2013.egi.eu/</p> <ul style="list-style-type: none"> • BIFI 1. Jaime Ibar et al, Cloud resources at BIFI, [3] • CESGA: 1. I. Díaz et al, participated in the EGI Accounting workshop which enabled the developers of EGI Accounting tools to disseminate information about new versions and latest developments. The workshop covered recent developments in EGI Accounting, including the new APEL Client, the Regional APEL Server and Application Accounting, [4] 2. A. Simon et al, Running Hadoop in the cloud, [3] • CETA-GRID 1. Miguel Ángel Díaz Corchero et al, Managing and using interoperable DCIs through a standard-based Science Gateway, [5] • CIEMAT 1. M. Cárdena Montes et al, demonstration: Managing and using interoperable DCIs through a standard-based Science Gateway, [6] 2. Manuel Rodríguez-Pascual et al, Standard-based Interoperability amongst HPC, Grid and Cloud Resources Distributed Worldwide with Catania Science Gateways, [7] • IFAE 1. J. Flix et al, demonstration: Connecting PIC Tier-1 into the network of the future, [6] 2. J. Flix et al, demonstration: Integrating and testing SLURM in EMI-3 cream-CE, [6] 3. J. Flix et al, demonstration: Setting up a log centralization infrastructure, [6] 4. J. Flix, M. Delfino et al, participated in the following workshop: New developments in WLCG for Run2, [1] • IFCA 1. Pablo Orviz, Alvaro Lopez, Towards an Agile Infrastructure: IFCA experience, [8] • LIP 1. J. Pina, UMD staged rollout testing, [9]
16-20 Sep 2013	Madrid, Spain	LIFEWATCH workshop at EGI TF 2013	1	<ul style="list-style-type: none"> • LIP 1. J. Gomes, IBERGRID Infrastructure
17-20 Sep 2013	Madrid, Spain	CAEPIA	1	<p>Conference Programme URL: http://cae pia13.aepia.org/</p> <ul style="list-style-type: none"> • CIEMAT 1. Miguel Cárdenas Montes et al, Concurrent CPU-GPU code optimization: The two-point angular correlation function as case study

19-20 Sep 2013	Madrid, Spain	IBERGRID 2013, 7th Iberian Grid Infrastructure Conference	(~50)	<p>Conference Programme URL: [10]</p> <ul style="list-style-type: none"> • CESGA: <ol style="list-style-type: none"> 1. A. Simon et al, Towards Federated Cloud Image Management • CIEMAT <ol style="list-style-type: none"> 1. M. Cárdena Montes et al, Calculation of Two-Point Angular Correlation Function: Implementations on Many-Cores and Multicores Processors 2. Juan José Rodríguez Vázquez et al, Performance Assessment of a Chaos-based Image Cipher on Multi-GPU 3. Manuel Rodríguez-Pascual et al, An unattended and fault-tolerant approach for the execution of distributed applications • IFCA <ol style="list-style-type: none"> 1. E. Fernandez, IberCloud Status Update 2. Alvaro Lopez et al, Analysis of Scientific Cloud Computing requirements • IFISC-GRID <ol style="list-style-type: none"> 1. A. Tugores et al, Big data and urban mobility • LIP <ol style="list-style-type: none"> 1. G. Borges et al, SPARKS, a dynamic power-aware approach for managing computing cluster resources 2. J. Gomes, Ibergrid Status 3. J. Gomes et al, Analyzing File Access Patterns in Distributed File-systems • PIC <ol style="list-style-type: none"> 1. José Flix et al, The LHC Tier1 at PIC: experience from first LHC run and getting prepared for the next • UPV <ol style="list-style-type: none"> 1. I. Blanquer et al, Leveraging Hybrid Data Infrastructure for Ecological Niche Modeling: The EUBrazilOpenBio Experience 2. I. Blanquer et al, Improving data locality on distributed Grid applications in bioinformatics 3. M. Caballer et al, Platform to Ease the Deployment and Improve the Availability of TRENCADIS Infrastructure
19-20 Sep 2013	Barcelona, Spain	European Conference on Complex Systems 2013	1	<p>Conference Programme URL: http://www.eccs13.eu/</p> <ul style="list-style-type: none"> • CIEMAT <ol style="list-style-type: none"> 1. Francisco Prieto, Modeling Grid Environments as a Small-World Network. An Efficient Resources Selection Model
22-27 Sep 2013	Oxford (UK)	EFTC2013	1	<p>Conference Programme URL: http://www.eftc2013.org.uk/</p> <ul style="list-style-type: none"> • CIEMAT <ol style="list-style-type: none"> 1. José Luis Velasco Garasa, Invited talk: Neoclassical Viscosity and Rotation in stellarators
14 Oct 2013	Amsterdam	CHEP2013	6	<p>Conference Programme URL: http://www.chep2013.org/</p> <ul style="list-style-type: none"> • IFAE <ol style="list-style-type: none"> 1. V. Méndez et al, Cloud flexibility using Dirac Interware 2. J. Flix et al, Operating the Worldwide LHC Computing Grid: current and future challenges 3. J. Flix, F. López et al, Deployment of a WLCG network monitoring infrastructure based on the perfSONAR-PS technology 4. J. Flix et al, CMS Computing Operations During Run1 5. A. Sedov et al, ATLAS Distributed Computing Operation Shift Teams experience during the discovery year and beginning of the Long Shutdown 1 6. A. Perez-Calero, CMS Multicore Scheduling Strategy 7. M. Delfino, A.Sedov et al, Lessons learned from the ATLAS performance studies of the Iberian Cloud for the first LHC running period

1.3. PUBLICATIONS

Publication title	Journal / Proceedings title	Journal references Volume number Issue Pages from - to	Authors 1. 2. 3. Et al?
Cloud resources at BIFI	EGI Technical Forum 2013 Conference Abstract	[3]	J. Ibar et al
Running Hadoop in the cloud	EGI Technical Forum 2013 Conference Abstract	[3]	A. Simon et al
Managing and using interoperable DCIs through a standard-based Science Gateway	EGI Technical Forum 2013 Conference Abstract	[5]	M. Díaz et al
Standard-based Interoperability amongst HPC, Grid and Cloud Resources Distributed Worldwide with Catania Science Gateways	EGI Technical Forum 2013 Conference Abstract	[7]	M. Rodríguez-Pascual et al
Towards an Agile Infrastructure: IFCA experience	EGI Technical Forum 2013 Conference Proceedings	[8]	Pablo Orviz, Alvaro Lopez
SPARKS, a dynamic power-aware approach for managing computing cluster resources	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 3-15	G. Borges et al
Towards Federated Cloud Image Management	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 33-44	A. Simon et al
Graph Database for Structured Radiology Reporting	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 61-74	I. Blanquer et al
Big data and urban mobility	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 75-88	A. Tugores et al
Analyzing File Access Patterns in Distributed File-systems	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 89-101	J. Gomes et al
Studying the improving of data locality on distributed Grid applications in bioinformatics	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 103-115	I. Blanquer et al
Platform to Ease the Deployment and Improve the Availability of TRENCADIS Infrastructure	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 133-145	M. Caballer et al
Analysis of Scientific Cloud Computing requirements	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 147-158	Alvaro Lopez et al
Easing the Structural Analysis Migration to the cloud	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 159-171	M. Caballer et al
Leveraging Hybrid Data Infrastructure for Ecological Niche Modeling: The EUBrazilOpenBio Experience	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 175-187	I. Blanquer et al

An unattended and fault-tolerant approach for the execution of distributed applications	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 189-202	Manuel Rodríguez-Pascual et al
Calculation of Two-Point Angular Correlation Function: Implementations on Many-Cores and Multicores Processors	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 203-214	M. Cárdenas et al
Performance Assessment of a Chaos-based Image Cipher on Multi-GPU	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 215-226	J. Rodríguez et al
The LHC Tier1 at PIC: experience from first LHC run and getting prepared for the next	7th Iberian Grid Infrastructure Conference Proceedings	Ed.: Editorial Universitat Politècnica de València, ISBN: 978-84-9048-110-3, Pages: 241-253	J. Flix et al

2. ACTIVITY REPORT

2.1. Progress Summary

- Research on automatic failover mechanisms for regional SAM
 - Participation in the task force on availability/reliability computation
 - Follow up and support of the SHA-2 compliant infrastructure campaign
 - Follow up and support of the Glue-validator compliant infrastructure campaign
 - Follow up with regional sites regarding
1. EGI SVG ADVISORY [EGI-SVG-2013-5890]
 2. EGI SVG ADVISORY [EGI-SVG-2013-5266]
 3. EGI SVG ADVISORY [EGI-SVG-2013-5615]
 4. EGI SVG ADVISORY [EGI-SVG-2012-3306]
 5. EGI SVG ADVISORY [EGI-SVG-2013-5999]
 6. EGI SVG ADVISORY [EGI-SVG-2013-5138]

2.2. Main Achievements

- The WMS used by the Ibergrid Regional Nagios (<https://rnagios.ibergrid.cesga.es/nagios/>) and the Ibergrid Regional Nagios backup (<https://rnagios.ncg.ingrid.pt/nagios/>) to submit the SAM tests were migrated to UMD-3. These WMS are:

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* wms02.ncg.ingrid.pt hosted at LIP.
* wms03.egi.cesga.es hosted at CESGA.
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- 100% availability/reliability for the topbdii.core.ibergrid.eu service during QR14
 - Sustainable integrated A/R for ibergrid sites during QR14
1. Aug (96%/98% A/R)
 2. Sept (94%/96% A/R)

2.3. Issues and mitigation

Issue Description	Mitigation Description
SAM tests seems to be failing for a couple of hours during the first hours of the 1st of each month	There is already a GGUS ticket opened to track this issue because it is also affecting to other NGIS, [11] . According to the ticket, the fix was released in EMI3 update at the end of September 2013 and it will be released in EMI2 update at the end of October 2013.
Failover between backup SAM instance and main SAM instance is manual	We are investigating in some mechanism to trigger the fail-over automatically
Incident with Top-BDIIs (due to a bug, some top-bdiis were publishing incomplete information, and the failover mechanism was always picking those BDIIs because they were fast to reply)	Top-BDIIs with problems were fixed and the recomputation of A/R was requested for the time period: [12]

References

- [1] <https://indico.egi.eu/indico/sessionDisplay.py?sessionId=53&confId=1417#20130917>
- [2] <http://hais13.usal.es/?q=node/6>
- [3] <https://indico.egi.eu/indico/contributionDisplay.py?sessionId=11&contribId=115&confId=1417>
- [4] <https://indico.egi.eu/indico/sessionDisplay.py?sessionId=41&confId=1417#20130918>
- [5] <https://indico.egi.eu/indico/contributionDisplay.py?sessionId=1&contribId=11&confId=1662>
- [6] http://tf2013.egi.eu/posters_demos/
- [7] <https://indico.egi.eu/indico/contributionDisplay.py?contribId=189&confId=1417>
- [8] <https://indico.egi.eu/indico/contributionDisplay.py?sessionId=27&contribId=256&confId=1417>
- [9] <https://indico.egi.eu/indico/contributionDisplay.py?sessionId=53&contribId=248&confId=1417>
- [10] <http://www.ibergrid.eu/2013/programme.html>
- [11] https://ggus.eu/ws/ticket_info.php?ticket=87997
- [12] https://ggus.eu/ws/ticket_info.php?ticket=97865

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