Virtual Observatory
Paris Data Centre

Support to the Infrastructure

WP5 - SA2

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LPMA – VO Paris Data Centre

Maintenance and monitoring of the core infrastructure

- **Monitoring services (Nagios) are up & running**

(https://voparis-vamdc-monitoring.obspm.fr/)

- **The new services are included periodically**
- **The reports are accessible to the data providers**
- **The technical contact for the service receives an alert in case of failure.**

Maintenance and monitoring of

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Current Network Status
Last Updated: Mon Feb 13 17:20:41 CET 2012
Updated every 90 seconds
Nagios® Core™ 3.3.1 - www.nagios.org
Logged in as *lesidaner*

View History For all hosts
View Notifications For All Hosts
View Host Status Detail For All Hosts

Host Status Totals

Up	Down	Unreachable	Pending
22	0	0	0

All Problems	All Types
0	22

Service Status Details For All Hosts

Host	Service	Status	Last Check	Duration
CDSD	CDSD-tap .	OK	02-13-2012 17:12:24	0d 0h 28m 17s
OA_Cagliari_PAH	Theoretical spectral database of polycyclic aromatic hydrocarbons	OK	02-13-2012 17:20:14	14d 5h 10m 27s
SMPO	Spectroscopy and Molecular Properties of Ozone	OK	02-13-2012 17:20:14	15d 13h 0m 27s
axis_xms	AXIS optical spectra XMM	OK	02-13-2012 17:18:14	0d 9h 22m 27s
basecol-tap	Basecol-tap-availability	OK	02-13-2012 17:17:24	3d 6h 48m 27s
	tomcat-mld	OK	02-13-2012 17:12:14	3d 6h 48m 27s
carbon_cluster	Theoretical spectral database of pure carbon clusters	OK	02-13-2012 17:20:14	14d 5h 10m 27s
cdms	CDMS: Cologne database for molecular spectroscopy	OK	02-13-2012 17:18:14	0d 19h 12m 27s
cdms-tap	CDMS-tap-availability	OK	02-13-2012 17:18:14	27d 11h 0m 58s
	CDMS-tap-availability-django	OK	02-13-2012 17:16:42	0d 3h 23m 59s
chianti	CHIANTI-tap-availability	OK	02-13-2012 17:18:14	0d 0h 22m 27s
dijon_methane_lines	dijon-methane-lines tap availability	OK	02-13-2012 17:17:46	20d 8h 28m 27s
ghosst-tap	ghosst-tap-availability	OK	02-13-2012 17:19:59	0d 1h 20m 42s
kida	kida-tap	OK	02-13-2012 17:16:40	0d 0h 24m 1s
stark_b	Stark-B-TAP	OK	02-13-2012 17:20:10	0d 0h 0m 31s
tipbase	TIPbase-tap	OK	02-13-2012 17:13:08	0d 0h 57m 33s
topbase	TOPbase-tap	OK	02-13-2012 17:18:08	0d 0h 52m 33s
umist	UMIST Database for Astrochemistry	OK	02-13-2012 17:18:14	23d 4h 52m 27s
umist-host-TAP	UMIST-tap-availability	OK	02-13-2012 17:12:32	0d 5h 24m 27s
vald_moscow	VALD acces in Moscow	OK	02-13-2012 17:17:32	18d 4h 26m 27s
vald_uppsala	VALD acces in Uppsala	OK	02-13-2012 17:12:14	6d 13h 18m 27s
vald_uppsala-tap	VALD TAP acces in Uppsala	OK	02-13-2012 17:14:59	0d 1h 25m 42s
vald_wien	VALD acces in Vienna	OK	02-13-2012 17:20:16	3d 18h 40m 25s
vamdc.eu	Site VAMDC	OK	02-13-2012 17:18:11	3d 6h 48m 27s

Maintenance and monitoring of the core infrastructure

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Task 1

- **Reports are avail**

for providers

per service/host

State	Type / Reason	Time	% Total Time	% Known Time
OK	Unscheduled	43d 17h 20m 7s	99.984%	99.984%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	43d 17h 20m 7s	99.984%	99.984%
WARNING	Unscheduled	0d 0h 0m 0s	0.000%	0.000%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 0m 0s	0.000%	0.000%
UNKNOWN	Unscheduled	0d 0h 0m 0s	0.000%	0.000%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 0m 0s	0.000%	0.000%
CRITICAL	Unscheduled	0d 0h 9m 59s	0.016%	0.016%
	Scheduled	0d 0h 0m 0s	0.000%	0.000%
	Total	0d 0h 9m 59s	0.016%	0.016%
Undetermined	Nagios Not Running	0d 0h 0m 0s	0.000%	
	Insufficient Data	0d 0h 0m 0s	0.000%	
	Total	0d 0h 0m 0s	0.000%	
All	Total	43d 17h 30m 6s	100.000%	100.000%

Update

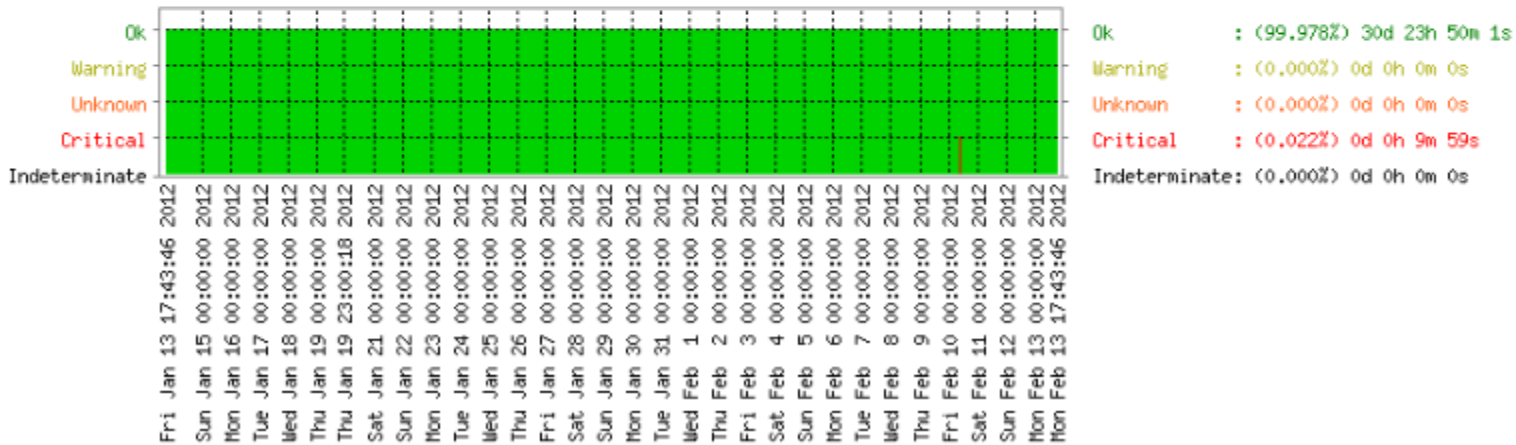
Service State Trends
Last Updated: Mon Feb 13 17:43:46 CET 2012
Nagios® Core™ 3.3.1 - www.nagios.org
Logged in as *lesidaner*

View Trends For This Host
View Availability Report For This Service
View Alert Histogram For This Service
View Alert History For This Service
View Notifications For This Service

Service 'Basecol-tap-availability' On Host 'basecol-tap'

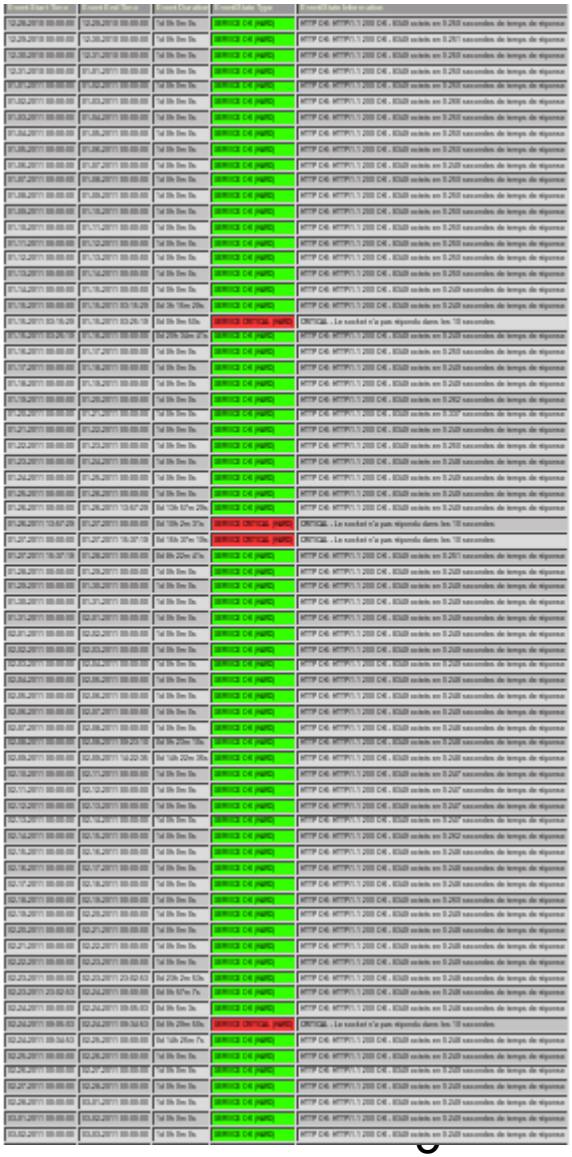
01-13-2012 17:43:46 to 02-13-2012 17:43:46
Duration: 31d 0h 0m 0s

State History For Service 'Basecol-tap-availability' On Host 'basecol-tap'
Fri Jan 13 17:43:46 2012 to Mon Feb 13 17:43:46 2012



Maintenance and monitoring of the core infrastructure

- An event log is also available



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Maintenance and monitoring of the core infrastructure

- **Service**

Also test on compliance using information from the registry and test using the validator.

http://voplus.obspm.fr/vamdc/validation/compliance.html

- **Future**

Follow supervision.

Grid Operations

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Making the codes executable on grid nodes

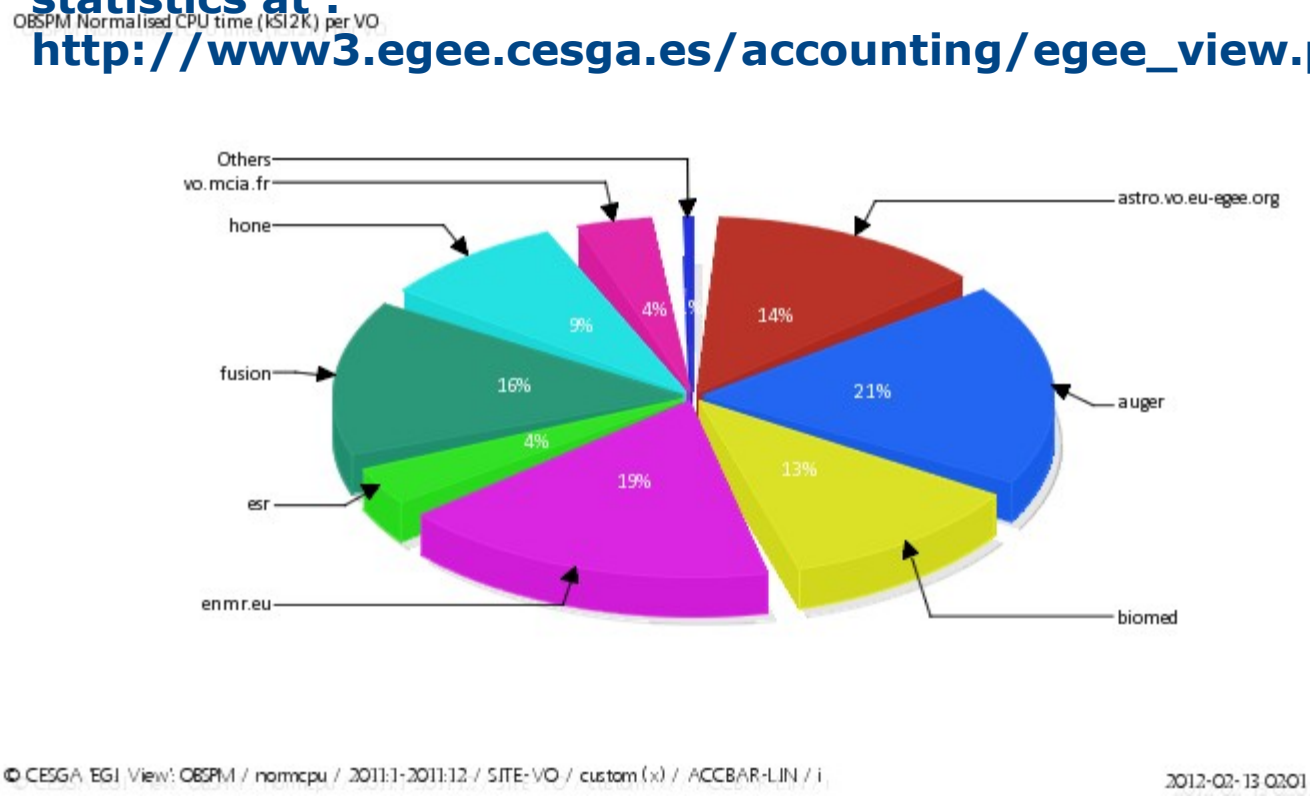
- Providing Grid portals access that are monitored and help to handle the results

- A Grid node in voparis is available it's status and use are available

http://gstat-prod.cern.ch/gstat/site/OBSPM/

statistics at :

http://www3.egee.cesga.es/accounting/egee_view.php



Grid Operations

- **The Documentation available about GRID access and use is available at :**

http://www.vamdc.eu/usersupport/114-gridtuts

- **Future**

Follow the maintenance of grid access.

Provide support to users.

Support to "users" of the infrastructure

Documentation

* documentation for user is available on the web site www.vamdc.eu => Infrastructure
* Registry, How to publish, The Data Model, Grid tutorial.
* soon available : monitoring, mirroring (will be modified)

Personalized Help

*The HelpDesk is available :

using Request Tracker https://voparis-vamdc-support.obspm.fr.

It provides a single entry point **support@vamdc.eu**

Support to "users" of the infrastructure

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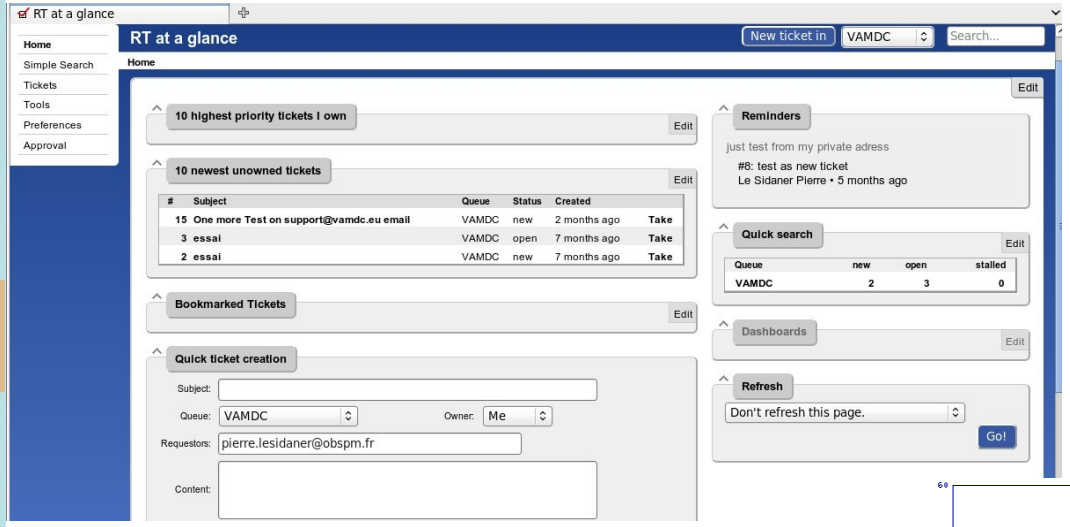
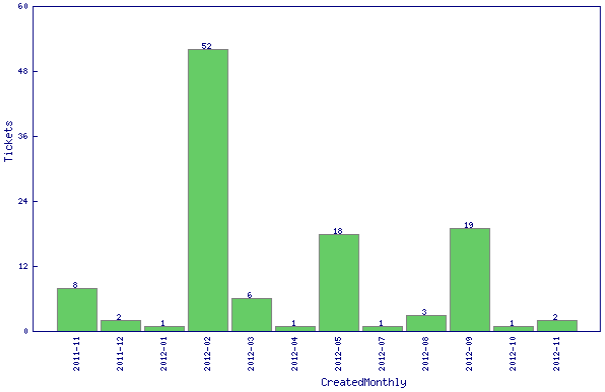
HELPDESK : Request Tracker

*user send an email to support@vamdc.eu

* An alert is sent to the support community





* The ticket is handle by a team

* Once the problem is solved, information is available for FAQ and statistics

Support to "users" of the infrastructure

HELPDESK : Request Tracker

*Every question from a user generates a ticket

*One of the member should take ownership of a ticket or delete it.

*Once the problem is solved the ticket status should be set to Resolved

Future

Follow the maintenance Request Tracker.

Support to "users" of the infrastructure

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Development of Statistical Logging website.

- Takes location for Registry.

- Automated script to generate HTML pages using the Registry to point to the statistical logging site of a particular node.

- URL:

https://voparis-vamdc-stats.obspm.fr/awstats.php

Future

URL of stat page will be maintained

Support to "users" of the infrastructure

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Online video traininng tutorial for

Portal
An easy to use web based interface from which queries be sent to all relevant nodes of the VAMDC infrastructure.

Taverna usage
A plugin to the Taverna workflow engine, used to produce more complicated workflows utilising VAMDC and other, similar e-Infrastructures

http://voparis-twiki.obspm.fr/twiki/bin/view/VAMDC/UserGuides

Uptime and mirroring

- **Reliability and service warranty**
  - Multiple independent access for each instance of services
  - Mirrorring of services and data
  - Mirrorring of services will be hosted by virtual Machine (Jail FreeBsd)
  - Mirrorring of registries (astrogrid mirror at Obs Paris)
  - Everything is transparent to users
    - The client displays only one instance of the service.

Uptime and mirroring

- **How to manage physical service replication?**
  - Replicate each Python based service/database using the Django framework installed in Paris
  - Replicate JAVA based services/databses based using Tomcat installed in Paris:

stak-b, tipbase, topbase, hitran are already available in two instances. Caglairi is in the process.

Registries replicated at

http://voparis-vamdc-astrogrid.obspm.fr:8080/registry/main/index.jsp
http://voparis-vamdc-astrogrid.obspm.fr:8080/registry-dev/main/index.jsp
http://voparis-vamdc-astrogrid.obspm.fr:8080/registry1102/main/index.jsp
http://voparis-vamdc-astrogrid.obspm.fr:8080/registry1207/main/index.jsp

Uptime and mirroring

- **How to use service replication for end user**
  - In the registry a parameter define each service as Multiple URL
  - Multiple accesses will be held by the software client, only one ressource will be viewed by the end user. Only one ressource in the registry
  - No complex dynamic dns, dns round-robin, Load balancing or heart beat ...

Quality Assurance of data and resources

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. Data services

- Conpliance of service to standards and XSAMS schema done by M. Doronin

http://voplus.obspm.fr/vamdc/validation/compliance.html

- Very hard to check scientific correctness of data (reponsibility of providers

- **Registry**

- test as an entry the validity of the content, only if the xml is valid.