

EGI-Engage - Operation Tools

EGI Operations Portal

Cyril L'Orphelin, IN2P3



Converging goals in terms of VO operations

- Complementary monitoring views
- Dashboard of resources supporting a VO
- Improve tools to manage user communities
- Similar needs and complementary developments

VAPOR developed in close collaboration with Ops Portal team

- Use of Lavoisier data integration service
- Same web application framework
- Common hosting web servers

Existing tools

- User Database based on VOMS servers
- User tracking Tool
- Robot certificate List
- VO ID cards

Envisaged improvements

- Extension of the capture of users on different registration systems
- API to modify VOMS/VO DB information
- Complete VO Users information
- Give a single point of access for VO users

Users database

- Register more than just administrative data
- Apprehend the diversity of users: identify users "behind" robot certificates

Manager users life-cycle workflow

- Interface with LFC, VOMS, EGI Apps Db

Foster resource usage acknowledgment

- Track scientific production => *acknowledgement*
- VT Scientific Publications Repository

Existing tools

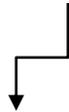
- Resource distribution browser (GLUE 2)
- Dashboard

Improvements

- Extends the resource distribution browser :
 - To cloud resources
 - To give more details (OS , number of cores , capacity)
 - To replace some Gstat feature
 - Provide API
- Extends the dashboard
 - To monitor cloud infrastructures

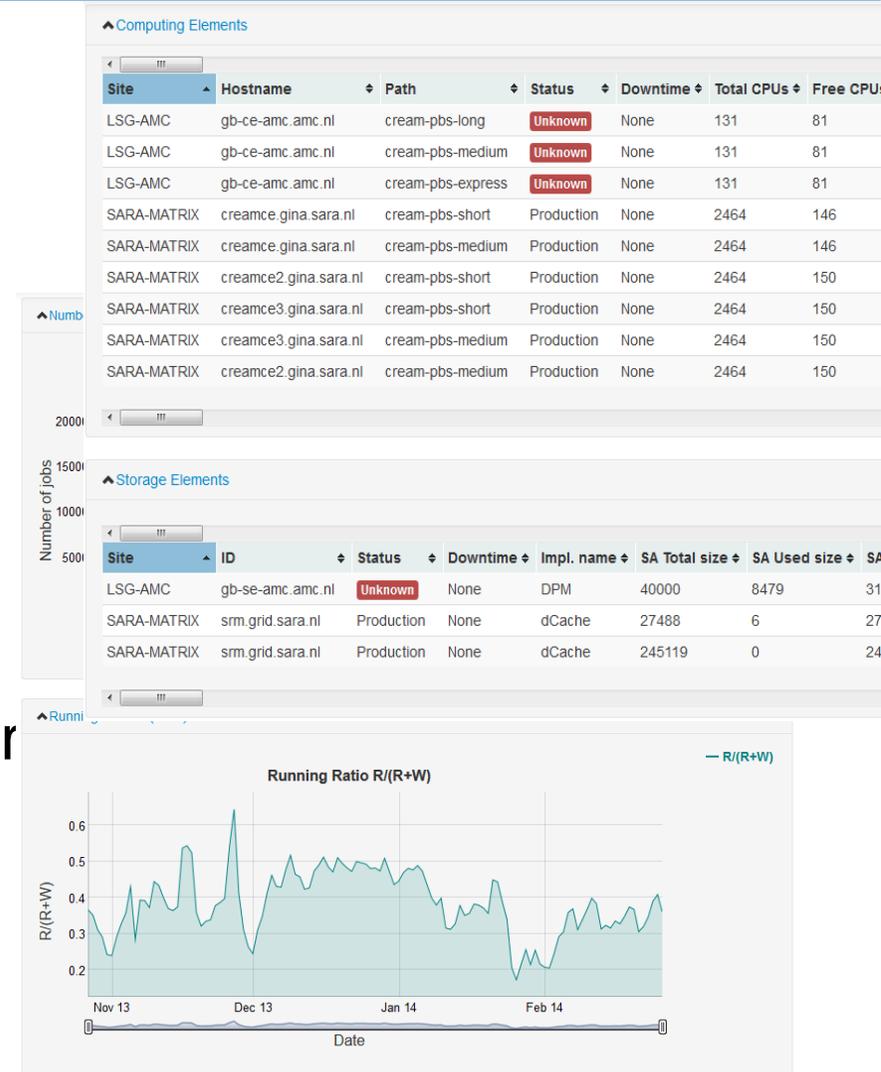
View of resources status

- Detailed report of all resources supporting the VO (BDII, GOCDDB)
- Monitor Running vs. Waiting jobs (queues with all jobs failed/no job)
- Available for grid resources (Glue1.3)



Extensions for cloud resources

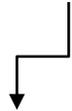
- Synthetic view of resources at provider
- Monitor number of VMs requested, created...
- Upgrade to Glue 2



Monitor resources status

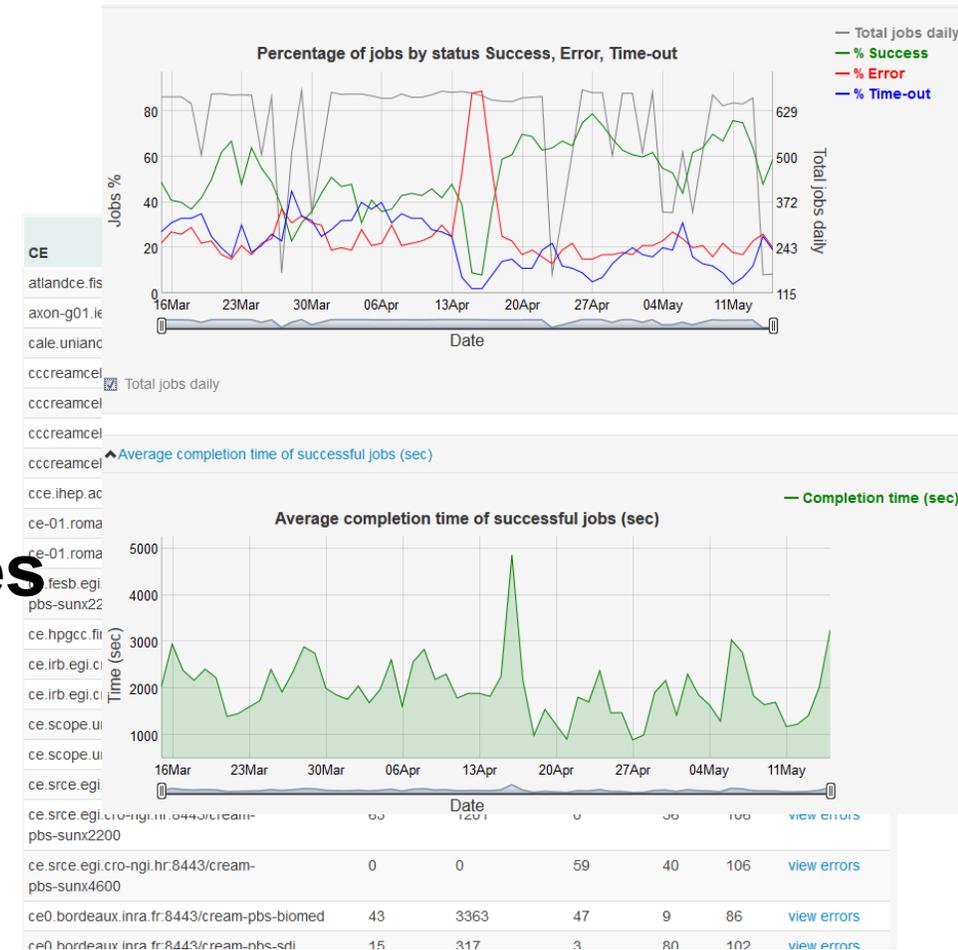
JobMonitor

- Monitor how the infrastructure is responsive for the VO
- Success/error/time out rates
- Avg. jobs completion time



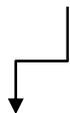
Extensions for cloud resources

- VmMonitor to monitor VM creation success/error/time out rates
- Avg. VM creation time
- White-list of cloud sites



VO Data Management

- Catalog-based SE scan (monitor Ses feeling up, SE decommissioning, contact users...)
- Consistency issues: cleanup of dark data/lost files



Extensions for cloud resources

- Monitor storage available for a VO at cloud sites (monitor storage feeling up, handle storage decommissioning...)
- Support other types of file catalogs?

Development

Timeline

Prepare the detailed roadmap – Find a new developer

March – May 2015

Consolidated views of cloud resources:

- Extend the resource distribution browser to cloud resources
- Extend VAPOR VO resource view to cloud resources

May – October 2015

Extend the dashboard to monitor cloud infrastructures

October – December 2015

Replace Gstat main features

January – March 2016

Extend the information channel with multiple API

April – May 2016

Monitor the number of running VMs vs. number of VM creation requests at each cloud site

June 2016

Monitor the VM creation success/error/time-out rates at each cloud site, compute a white-list of best-performing cloud sites from the VO perspective

July – December 2016

Extend VO Data Management features to deal with storage available for a VO at cloud sites, add support for file catalog solutions that will be adopted by the EGI Federated Cloud

January – February 2016