

AGIS overview for sites: tutorial and Q&A

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What is AGIS?

TOPOLOGY MANAGEMENT	SERVICE MANAGEMENT	OPERATIONS	DOCUMENTATION
<ul style="list-style-type: none"> ▪ Define RC site ▪ Define Experiment site ▪ Define DDM endpoint ▪ Define PANDA site ▪ Define PANDA queue ▪ RC pledges ▪ Find DDM endpoints links ▪ Find TransferMatrix links 	<ul style="list-style-type: none"> ▪ Define OS service ▪ Define LFC service ▪ Define SE service ▪ Define CE service ▪ Define Redirector service ▪ Define PerfSonar service ▪ Define Frontier service ▪ Define Squid service ▪ Define Central service 	<ul style="list-style-type: none"> ▪ Crons list ▪ ADMINs list ▪ Changes log ▪ Request ADMIN privileges 	<ul style="list-style-type: none"> ▪ Main TWiki ▪ TWiki WEBUI instructions ▪ API Docs
<div style="border: 1px solid blue; padding: 5px; display: inline-block;"> http://atlas-agis.cern.ch </div>			
DOWNTIMES	TOACACHE EXPORT	COMPARISON & VALIDATION TOOLS	
<ul style="list-style-type: none"> ▪ Downtime calendar ▪ DDM Blacklisting data ▪ PANDA Blacklisting data 	<ul style="list-style-type: none"> ▪ dynamic ToACache (changes are immediately propagated): http://atlas-agis-api.cern.ch/request/toocache/TiersOfATLASCache.py ▪ static ToACache: http://atlas-agis-api.cern.ch/ToACache/TiersOfATLASCache.py ▪ previous caches: http://atlas-agis-api.cern.ch/ToACache/cache/ ▪ View/Modify ToACache ExtraData (RSE integration) <ul style="list-style-type: none"> ▪ ToACache with Extra data 	<ul style="list-style-type: none"> ▪ Consistency checker ▪ ToAComparator ▪ AGIS-BDII CE comparison ▪ AGIS-Schedconf-PF mon CE comparison ▪ AGIS-OIMGOCDB sites+services comparison ▪ AGIS-PANDA PandaResource+SWReleases comparison ▪ AGIS-Schedconfig (topology) comparison ▪ AGIS-Schedconfig JSON comparison ▪ AGIS-GSR services comparison 	

How to get access to AGIS

- Your DN has been changed?
- First time using AGIS to modify site specifics (PandaQueues, DDMEndpoints, ATLAS Sites, services, etc)
- Need to ask additional admin privileges to operate with AGIS?

1. Request ADMIN permission from the main page:
<http://atlas-agis.cern.ch>

2. Use SSL certificate or input custom DN name to be registered

3. Select required permissions

4. Notify atlas-adc-agis@cern.ch in case of urgent request

OPERATIONS

- Crons list
- ADMINs list
- Changes log
- **Request ADMIN privileges**

Step 1 of 2

Distinguished Name: /DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=anisyonk/CN=677987/CN=Alexey Anisenkov2

start again

Step 2 of 2

Groups:

- ATLAS-Full
- DDM-Admin
- DDM-Blacklisting
- PANDA-Admin

Please specify the privileges for DN=/DC=ch/DC=cern/OU=Organic Units/OU=Users/CN=anisyonk/CN=677987/CN=Alexey Anisenkov2

start again

How to attach an ObjectStore for eventservice/logs to PandaQueue

1. Identify PandaQueue to be modified from the PQ table view:
e.g. **AGLT2_MCORE-condor** from http://atlas-agis.cern.ch/agis/pandaqueue/table_view/

ATLAS Site	PanDA Site	Template object	PanDA Resource	PanDA Queue	state	(current) status	type	capability	CLOUD	TIER
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	AGLT2_MCORE	  AGLT2_MCORE-condor	ACTIVE	online	production	mcore	US	T2D

to 1 of 1 entries

2. From PQ details page check OS buckets already attached to the PandaQueue
http://atlas-agis.cern.ch/agis/pandaqueue/detail/AGLT2_MCORE-condor/full/

PandaQueue Object details

PanDa Queue name: AGLT2_MCORE-condor **Type:** production **Capability:** mcore **Last Modified:** 2017-08-01 10:00:00
PanDA resource name: AGLT2_MCORE **- is_default:** No **HC param:** AutoExclusion **State:** ACTIVE

Associated ObjectStorage buckets

OS endpoint	flavour	OS name	OS.state	Site.state	Site	Bucket	Bucket.endpoint
s3://cephgw.usatlas.bnl.gov:8443/	AWS-S3	BNL_OS_0	ACTIVE	ACTIVE	BNL-ATLAS	eventservice	/atlas_eventservice
s3://cephgw.usatlas.bnl.gov:8443/	AWS-S3	BNL_OS_0	ACTIVE	ACTIVE	BNL-ATLAS	logs	/atlas_logs

[Find and associate another ObjectStorage/Bucket. Modify attached objectstores](#)

3. To remove or attach new OS bucket - click at *“modify attached objectstores”* link
http://atlas-agis.cern.ch/agis/pandaqueue/addobjectstore/AGLT2_MCORE-condor/

How to attach an ObjectStore for eventservice/logs to PandaQueue [2]

- Test use-case: change ObjectStore from BNL to AMAZON for the eventservice

http://atlas-agis.cern.ch/agis/pandaqueue/addobjectstore/AGLT2_MCORE-condor/

PANDA Queue: AGLT2_MCORE-condor

Already Associated OS/buckets

Bucket name	OS name	OS Endpoint	OS.state	Site	Site.state	Remove relation
eventservice	BNL_OS_0	s3://cephgw.usatlas.bnl.gov:8443/	ACTIVE	BNL-ATLAS	ACTIVE	<input checked="" type="checkbox"/>
logs	BNL_OS_0	s3://cephgw.usatlas.bnl.gov:8443/	ACTIVE	BNL-ATLAS	ACTIVE	<input type="checkbox"/>

4. Remove BNL_OS_0 eventservice

Remove selected relations

Attach another OS/bucket

Search OS buckets: Please, enter name (or part of name) of ObjectStorage, site or bucket

Search objectstores [Full list of bucket objects](#)

5. Find AMAZON_OS bucket to be attached

Bucket name	OS name	OS Endpoint	OS.state	Site	Site.state	Add relation
eventservice	AMAZON_OS_0	s3://s3.amazonaws.com:80/	ACTIVE	BNL-ATLAS	ACTIVE	<input checked="" type="checkbox"/>
eventservice	AMAZON_OS_0	s3://s3.amazonaws.com:443/	ACTIVE	BNL-ATLAS	ACTIVE	<input type="checkbox"/>
eventservice	CERN_OS_0	root://atlas-objectstore.cern.ch/	DISABLED	CERN-PROD	ACTIVE	<input type="checkbox"/>
eventservice	CERN_OS_1	s3://cs3.cern.ch:443/	ACTIVE	CERN-PROD	ACTIVE	<input type="checkbox"/>
eventservice	LANCS_OS_0	s3://storage.datacentred.io	ACTIVE	UKI-NORTHGRID-LANCS-HEP	ACTIVE	<input type="checkbox"/>
eventservice	RAL_OS_0	s3://s3.echo.stfc.ac.uk:80/	ACTIVE	RAL-LCG2	ACTIVE	<input type="checkbox"/>

6. Once selected click "Save" to attach buckets

Save

Manually declare (CE, ObjectStore) services in AGIS via WebUI

- AGIS automatically collects CE (SRM, PerfSonar, etc) services from GOCDB/OIM
- What should be done if expected CE service (for whatever reasons) not defined in AGIS?
 - contact atlas-adc-agis@cern.ch in case you consider this as a bug
 - otherwise just inject missing service manually into the system using WebUI

SERVICE MANAGEMENT

- Define OS service
- Define LFC service
- Define SE service
- Define CE service
- Define Redirector service
- Define PerfSonar service
- Define Frontier service
- Define Squid service
- Define Central service

1. Main AGIS page contains the links for manual service declaration

2. next slide: example of CE edit/creation form (new style implementation)

We continuously improving AGIS WebUI, providing more useful views and forms with incorporated validation and data checks support before injecting it into DB

Manually declare (CE, ObjectStore) services in AGIS via WebUI [2]

- Example: CE edit form

https://atlas-agis.cern.ch/agis/computing_element/edit/17429/

The screenshot shows a web form for editing a Computing Element (CE). It is organized into several sections:

- Basic relations:** Contains fields for 'GOCDB/OIM Site' (CERN-PROD), 'Flavour' (HTCONDOR-CE), 'Endpoint' (alicondorce01.cern.ch:9619), 'type' (CE), and 'AGIS Service name' (CERN-PROD-CE-alicondorce01.cern.ch). A tooltip for the service name field explains the format: "AGIS Service name [name]. Leave the name field empty to auto fill it with generic value in format 'site-type-flavour-hostname'".
- Settings:** Includes 'Is_monitored' (checkbox), 'GOCDB/OIM Status' (production), and a 'Description' field.
- State settings:** Includes 'Object state' (ACTIVE) and 'State comment' (Service created by using WebUI).
- CE settings:** Includes 'Job manager' (condor) and 'Version' (production).

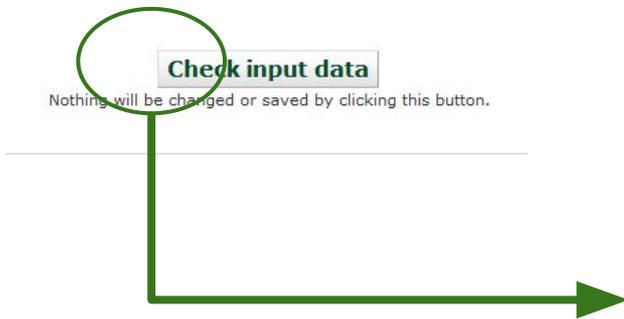
At the bottom, there is a 'Check input data' button with a warning: "Nothing will be changed or saved by clicking this button." The 'type' field at the very bottom is set to 'CE'.

General Features:

- Fields grouped by their meaning
- integrated tooltips and help messages
- auto-generated/default values for attributes whenever it possible (e.g. if internal service name leave empty, the form will generate appropriate value)
- drop-down menu with possible choices for given field (e.g. batch-system values)
- automatic suggestion while tapping (e.g. site name lookup)
- changes confirmation

Manually declare (CE, ObjectStore) services in AGIS via WebUI [3]

- Changes confirmation of object form before final commit



Check input data

Nothing will be changed or saved by clicking this button.

Please confirm the changes to be submitted for object CERN-PROD-CE-alicondorce01.cern.ch

Affected fields to be updated:

- description:** new description
- endpoint:** alicondorce04.cern.ch:9619
- is_monitored:** True
- jobmanager:** condor2
- state:** DISABLED
- Check all

Go back to edit form

Save & continue

The changes will be saved, you will be redirected to object description page.

How to declare new PandaQueue

1. Try to check if there are already any PQ defined for given ATLAS site.
2. Then just clone found PandaQueue
3. and overwrite/update schedconfig params of new instance
4. check/attach CEs to just created PQ object from the edit page

ATLAS Site	PanDA Site	Template object	PanDA Resource	PanDA Queue	state
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	AGLT2_LMEM	AGLT2_LMEM-condor	ACTIVE
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	AGLT2_MCORE	AGLT2_MCORE-condor	ACTIVE
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	AGLT2_SL6	AGLT2_SL6-condor	ACTIVE
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	AGLT2_TEST	AGLT2_TEST-condor	ACTIVE
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	ANALY_AGLT2_SL6	ANALY_AGLT2_SL6-condor	ACTIVE
AGLT2	GreatLakesT2	GreatLakesT2_VIRTUAL	ANALY_AGLT2_TIER3_TEST	ANALY_AGLT2_TIER3_TEST-condor	ACTIVE
AM-04-YERPHI	AM-04-YERPHI	AM-04-YERPHI_VIRTUAL	AM-04-YERPHI	prod-ce-yerphi-cluster-grid-am	ACTIVE
AM-04-YERPHI	AM-04-YERPHI	AM-04-YERPHI_VIRTUAL	ANALY_AM-04-YERPHI	ANALY_AM-04-YERPHI	ACTIVE
ANLASC	ANLASC	ANLASC_VIRTUAL	ANALY_ANLASC	ANALY_ANLASC	ACTIVE
ANLASC	ANLASC	ANLASC_VIRTUAL	ANALY_ANLASC_Argo	ANALY_ANLASC_Argo	ACTIVE
ANLASC	ANLASC	ANLASC_VIRTUAL	ANALY_ANLASC_T3Test	ANALY_ANLASC_T3Test	ACTIVE
ANLASC	ANLASC	ANLASC_VIRTUAL	ANLASC	ANLASC	ACTIVE
ARNES	ARNES	ARNES_VIRTUAL	ANALY_ARNES	ANALY_ARNES	ACTIVE

1. If there is no accepted PQ from which new object can be cloned
 - a. first need to create Virtual (parent) PandaQueue object (is_virtual=True) using [Define PANDA queue](#) link from the main page
 - b. and then inherit new object from just created Virtual PQ (use it as parent), update schedconfig settings and check attached CEs

Feedback

- ❑ Inquiries
- ❑ Bugs
- ❑ Suggestions
- ❑ Feature requests

please send to atlas-adc-agis@cern.ch

- ❑ Somewhere WebUI contains deprecated forms and views which become deprecated and required to be cleaned up and checked
 - ❑ e.g. DDMEndpoint forms management should be completely reviewed and changed to be Rucio friendly
 - ❑ increasingly implemented changes, requests in schema update somewhere need to change representation of views/forms (e.g. PandaQueue management)

any feedback is much appreciated!

It would be good if Operations may also help to review WebUI and identify “puzzling” pages to be cleaned.

do you have...?

an example of how to configure the new movers ?

examples “what to set”, i.e. please set the maxrss minrss (if different from 0), etc