New Cluster for
Heidelberg TRD group

Service Overview For All Host Groups

OS : Scientific Linux 3.06 (except for alice-n5)
Batch processing system : pbs (any advantage rather than using others such as condor?)

New Cluster

• Pbs server is running on alice-n1 →
• Currently, we only can submit job within these cluster

Alice Computing Cluster (al_computing)

Host	Status	Services	Actions
alice-n1	UP	3 OK	
alice-n2	UP	2 OK	
alice-n3	UP	2 OK	
alice-n4	UP	2 OK	
alice-n5	UP	1 OK / 1 CRITICAL	

Alice Storage Cluster (al_storage)

Host	Status	Services	Actions
alice-serv1	UP	2 OK	
alice-serv2	UP	2 OK	
alice-serv3	UP	2 OK	
alice-serv4	UP	2 OK	
alice-serv5	UP	2 OK	

Atom Physics (anp)

Host	Status	Services	Actions
q1	UP	1 OK	
q2	UP	1 OK	
quantum	UP	1 OK	

High Energy Physics (he)

Host	Status	Services	Actions
b0	UP	1 OK	
b0bar	UP	1 OK	
k0	UP	1 OK	
mu	UP	1 OK	

Physikalisches Institut (physi)

Host	Status	Services	Actions
elsol	UP	2 OK	
eta	UP	1 OK	
fopi	UP	1 OK	
lts01	UP	2 OK	
pi0	UP	35 OK	
pi1	UP	2 OK	
pi3	UP	1 OK	
rho0	UP	1 OK / 1 WARNING	

KRB / AFS test network (test)

Host	Status	Services	Actions
edv01	UP	1 OK	
rho3	UP	1 OK	
zenon	UP	4 OK	

Computing cluster :
Each node has 4 processors, ~290GB
Storage cluster :
Each node has 4 processors, ~1.5TB

System Configuration

Computing Node

Filesystem	Size	Mounted on
/dev/sda2	15G	/
/dev/sda1	99M	/boot
/dev/sda5	125G	/local0
/dev/sdb1	147G	/local1
none	1.6G	/dev/shm
rho0.physi.uni-heidelberg.de:/home	466G	/misc/home

Storage Node

Filesystem	Size	Mounted on
/dev/sda2	15G	/
/dev/sda1	99M	/boot
/dev/sdb1	1.5T	/data
/dev/sda5	49G	/local
none	2.0G	/dev/shm
rho0.physi.uni-heidelberg.de:/home	466G	/misc/home

Couple of questions

Disk management

- /data exist on each storage node
- Install NFS server on each storage node and mount each other and then give name like /data1, /data2, /data3, /data4, /data5. Also mount them into the computing node.

Software management : ex) CERN lib, Aliroot

- Install AFS server at one of the storage node for maintaining one software container?

User management

- rho0.physi.uni-heidelberg.de:/home is mounted
- /data1… should be group writable : is the "ceres" group name ok? Temporarily fine but later?

Installing Aliroot related software packages

- Install matching ROOT, GEANT3, Aliroot
- Could install several version depending on demand
- Install GENAT4, Fluka ?

Releases Note

These are the releases of AliRoot

	Version	CVS Tag	Released	Root Version	Geant3	Notes
	3.01	Release-3-01-Patch-00				First version entirely in C++
	3.02	Release-3-02	23/06/1999	v2-23-08		
	3.03	Release-3-03	14/07/2000	2.25		
	3.04	Release-3-04	22/12/2000	2.25.03		
	3.05	v3-05-Release	31/05/2001	v3-00-06		
	3.06	v3-06-Release	10/10/2001	3.01.06		
	3.06	v3-06-Rev-02	14/11/2001	v3-02-03		PPR production version (Nov-Dec/2001)
	3.07	v3-07-Release	25/03/2002	v3-02-07		
	3.08	v3-08-Rev-04	11/11/2002	v3-03-07		
	3.09	v3-09-Release	28/05/2003	v3-10-02	v0-6	
	4.01	v4-01-Rev-09	22/06/2004	v3-10-02/v4-04-02	v0-6/v1-1	PDC04
old	4.02	v4-02-Rev-02	15/03/2005	v3-10-02/v4-04-02	v1-1/v1-2	
pro	4.03	v4-03-Release	12/03/2006	v5-10-00	v1-4	PDC05 "compatible"
	4.04	v4-04-01	20/03/2006	v5-10-00	v1-4	test PDC06
new	4.04	v4-04-02	02/04/2006	v5-11-01-alice	v1-4	test PDC06