NAF Status Report

Main operational issues last month Going through Action Items

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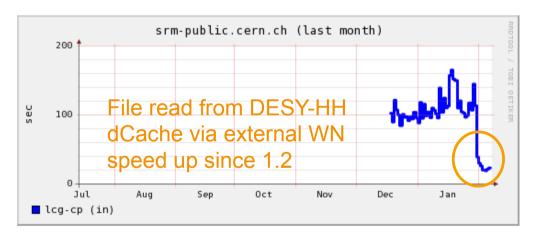
Network

- Around 25.1-26.1: 10 Gbit link between HH and ZN down, using 1 Gbit backup line
- Evening 27.1/Morning 28.1: Failure of one core router in HH, affecting basically all services in HH and partially routing from NAF-HH to NAF-ZN

> 1.2: Replacement of firewall. From 6:00-8:00 HW installation, some rules

had to be adjusted after this time

+ some minor issues



- "Future" work: 10 Gbit Infrastructure in HH needs HW-fix (wrong tin-solder used by manufacturer)
 - Will be done Friday <u>11.2@9:00</u>, takes ~15 minutes, and should be transparent



Batch news

- New batch share after exchange of old HH WN
 - ATLAS/CMS/ILC+CALICE/LHCb = 4/2/1/1 (for NAF purchased HW only!)
 - Ncores and estimated HepSpec taken into account
 - Estimated HepSpec06 Total: 22kHS06

VO	Old FS (%)	New FS (%)
ATLAS	25.6	28.1
CMS	43.6	41.6
ILC+CALICE	4.2	5.1
LHCb	26.5	25.2

PROOF & Multicore usage by experiments since 1.1.2011

VO	Wall-Days	% of all Wall
ATLAS	794	6.7%
CMS	51.6	0.2%

AFS

- Reorganization of AFS fileserver finished
 - Each VO has two dedicated FS (volume replicas might reside on FS of other VOs)
- > Have seen fewer incidents related to AFS and massive job start
 - Is the load better spread?
 - Are first mechanisms working?
 - Are users following advises?
 - Are users avoiding the NAF?



SL 5.6

> One testing IN: tcx168

Two potential problems

- > Tcmalloc was reported to be buggy, LHCb has seen issue
- > [root@tcx168 ~]# svn -version
 svn, version 1.6.11 (r934486)
- New Kernel already active on all nodes (recognizes 10 Gbit cards)
- > Please test and report!
- No time scale for deployment yet ...



Testing Job Submission Verification Scripts

> Status

- Current (base-)version: non-destructive
- First feedback: Increase maximum runtime for JSV-scripts
- Only restages IO when JSV is used and IO path is **not** specified (default)

> Next iteration:

- Speed-Up: Rewrite in Perl (instead of bash)
- Next test: All SGE-IO path transformed to local path (and later staging)

> Last iteration

- Move from personal AFS-public to local WN location
- JSV used for all jobs by policy



Action Items

id	who	description	status/comments
old-1	NAF/ATLAS	CMT problem	No news
1005-3	NAF	email notification for /scratch monitoring (instance full)	done
1006-6	NAF	dCache upgrade time line (10 GE in HH)	done
1007-1	NAF	setup Lustre groups for ATLAS, CMS, ILC	See slide
1007-2	NAF	report on help desk tickets	See slide
1010-2	NUC	resource requests	
1010-4	NAF	statistics on multicore/PROOF usage	See slide
1012-1	NAF	evaluate different stdout/stderr handling for SGE	See slide JSV
1012-2	NAF	report on CERN strategy for batch and AFS	Last meeting?
1012-3	NAF	new fair-share after hardware upgrade	See slide



Action Items (2)

id	who	description	status/comments
1012-4	ILC&NAF	develop strategy to manage Lustre space	No news
1101-1	NAF/experiments	WGS reliability/support/monitoring	See slide
1101-2	AH/WE/HS	naf_token for ubuntu&MacOSX	No news
1101-3	NAF	revisit: user information/twitter	See slide
1101-4	NAF/CMS/ATLAS	move support list to request tracker? No email received	notify YK via mail
1011-5	ATLAS	written request for NX	
1101-6	NAF/experiments	do we need a faster x-connection?	
1101-7	NAF/LHCb	limit number of parallelly running jobs	See slide
1101-8	experiments	test new job submission verifier	



Action Items (3)

- Lustre Group quotas:
 - New Lustre Client installed, first tests in separate instance successful
 - ... but we would need a downtime for testing it ... no downtime at the horizon yet
- WGS reliability/support/monitoring
 - Have installed hardware scanner to better detect failures.
 - Have reminded operators of procedures (boot ATLAS-IN -> Mail to supporters)
 - Rearranged IN of all VO, ATLAS++
- ➤ Twitter: Our script does not work anymore, Twitter changed its authentication method ⊗
- NAF/LHCB: Limit number of concurrently running jobs:
 - Needs some final communication between LHCb&Andreas Haupt



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