



Tier-1 status

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Recovery status and roadmap

- Recovery of 1st power line completed (21/12)
- Temporary 300 kW UPS (+ diesel engine) in operation (11/1)
 - Recovery of 1st UPS on going (ETA: mid February)
- Recovery of second line to be started
 - Strategy for recovery of 2nd UPS under evaluation
- Jan 24: test of water penetration
- Recovery of storage and farm systems started

Storage recovery

- Nearly all storage disk systems involved
 - 11 DDN JBODs (LHC, AMS)
 - RAID parity affected
 - 2 Huawei JBODs (all non-LHC experiments excepting AMS, Darkside, Virgo)
 - 2 Dell JBODs including controllers (Darkside and Virgo)
 - Most critical - 2 trays out of 5 went underwater. High probability of losing the data
 - 4 disk-servers (4 Alice)

System	PB	JBODs	Disks	Involved experiments
Huawei	3.4	2	150 x 6 TB	All CSN2 and 3 experiments excepting AMS, Darkside e Virgo
Dell	2.2	2	120 (48) x 4 TB	Darkside and Virgo
DDN 1,2	1.8	4		ATLAS, Alice and LHCb
DDN 8	2.7	2		LHCb
DDN 9	3.8	2		CMS
DDN 10, 11	10	3+2	252 x 8 TB	ATLAS, Alice and AMS
Total	23.9	9	~4 PBytes	

Recovery roadmap (2)

- *Not all storage back to operation at the same time!*
- Acceptance tests of tender 2017 storage in ~~second half~~ **end** of January
 - Installation not completed :-)
- Replacement of damaged components and recovery of other storage systems in January
 - Dell systems recovered
 - Disks being replaced
 - Disk-servers to be switched on today to check file-system
 - DDN replacement parts to be delivered on 22/1
 - Huawei replacement parts to be delivered on 27/1
- Metadata storage ok
- DDN1,..., DDN6 (out of maintenance) under test (spare parts available)
 - DDN2, DDN5, DDN6 – 1 dead controller
 - DDN4 - off-line for repair
- Data on DDN8 (out of maintenance) will be moved onto new storage
- Data on DDN8 to be moved onto new storage
- Disks of DDN8 will be used to replace wet disks of DDN9

Storage recovery status

System	PB	Strategy	Involved experiments	Status
Huawei	3.4	Replacement of damaged components	All CSN2 and 3 experiments excepting AMS, Darkside e Virgo	ETA: 27/1
Dell	2.2	Replacement of damaged components	Darkside and Virgo	OK
DDN 1,2	1.8	Move data to new storage	ATLAS, Alice and LHCb	
DDN 8	2.7	Move data to new storage	LHCb	
DDN 9	3.8	Repaired using DDN8 disks	CMS	
DDN 10, 11	10	Replacement of damaged components	ATLAS, Alice and AMS	ETA: 22/1
Total	23.9			

(*) Replacement procedure: replacement of crates, switching on with old disks, verification of the integrity of the data and then replacement, one by one, of the disks

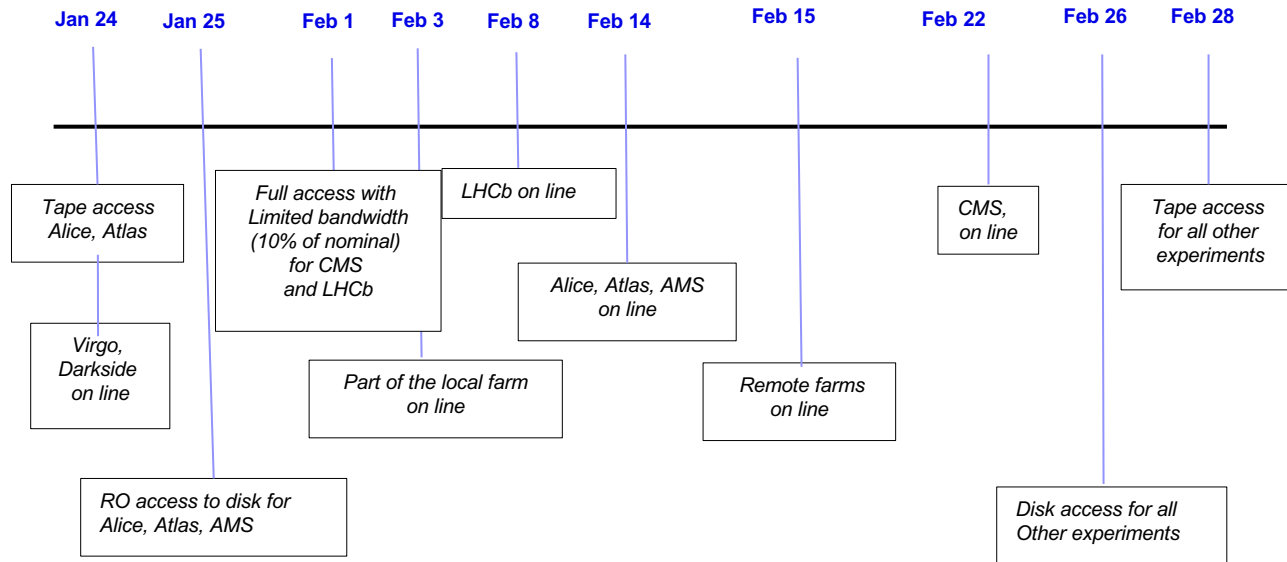
Tape library recovery status

- Tape library
 - Floating floor substituted
 - Internal cleaning completed
 - Remount operations completed on 17/1
 - Recertification of the system (in order to reenter in standard maintenance support) will start on 17/1
 - Replacement of damaged components
 - HBN card (shipped and mounted yesterday)
 - 2 arms of the library to be order (not blocking)
 - Tested 4 drives so far (ok)
 - Recovery of wet tapes started (ETA: end of February?)

Farm status

- Provisioning system recovered
- Accounting system recover on progress
 - Primary db at CNR....
- VPN CNAF-BARI ok
- LSF ok and ~all CEs ok
 - Killing zombie jobs
- Preparing to upgrade and patch WNs
 - Mandatory security patches (i.e. spectre e meltdown)
 - 1 wn in CNAF + 1 wn in Bari ready for trying the recipe
- Begin of February: only part of the local farm will be powered on (only 3 chillers in production) and w/o continuity
 - 30-50 kHS06 (to be verified)
- Exploiting the CNAF farm elastic extension to provide more computing power
 - Restart of remote farm partition in Bari-RECAS (~24 kHS06)
 - Install the CNAF-CINECA extension farm (~ 170 kHS06)

Tentative timeline



RO = read only