



ATLAS Critical Services

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Definitions

- The services are divided into 3 categories, according to their "criticality":
 - **Very high:**
 - interruption of these services affects online data-taking operations or stops any offline operations
 - **High:**
 - interruption of these services perturbs seriously offline computing operations
 - **Moderate:**
 - interruption of these services perturbs software development and part of computing operations
- This is a living document:
<http://twiki.cern.ch/twiki/bin/view/Atlas/AtlasCriticalServices>



Very High

Tier	Service	Criticality	Consequences of service interruption
0 (but is part of online system)	Oracle database RAC (online, ATONR)	Very high	Possible loss of DCS, Run Control, and Luminosity Block data while running. Run start needs configuration data from the online database. Buffering possibilities being investigated.
0	DDM central services	Very high	No access to data catalogues for production or analysis. All activities stop.



High: Tier-0 Operations

Tier	Service	Criticality	Consequences of service interruption
0	Data transfer from Point1 to Castor	High	Short (<1 day): events buffered in SFO disks, backlog transferred as connection is resumed. Long (>1 day): loss of data.
0	Online-offline database connectivity	High	No export of conditions data, this delays offline calibration and reconstruction. Import of calibration and configuration data proceed via files and does not require this connection.
0	Castor internal data movement	High	Slow down or interruption of Tier-0 processing. Buffers will fill up after 5 days.
0	Tier-0 processing farm	High	Slow down or interruption of Tier-0 processing. Buffers will fill up after 5 days.
0	Oracle database RAC (offline, ATLR)	High	Slow down or interruption of Tier-0 processing. Buffers will fill up after 5 days. No export of database data.



High: Central Grid Services

Tier	Service	Criticality	Consequences of service interruption
0	LFC	High	No access to CERN data information from the Grid. Production jobs stop or leave the catalogue with incorrect information. Desynchronization between catalogue and SE.
0	FTS	High	No data export from CERN. Short (<2 days): events buffered in Tier-0 disks and transferred as service is resumed. Long (>2 days): buffers will fill up; possible loss of data or redistribution to fewer Tier-1s.
0	VOMS server	High	All distributed computing activities stop. Failover to BNL server still to be tested.
0	Dashboard	High	Job and data transfer monitoring stops.
0	VObox	High	DDM site services don't run. No access to CERN data information. Production jobs stop or leave the catalogue with incorrect information. Desynchronization between catalogue and SEs.
0 and elsewhere	Distributed production servers	High	Grid production stops.



High: Distributed Grid Services

Tier	Service	Criticality	Consequences of service interruption
1	LFC	High	No access to whole cloud data information. Production jobs stop or leave the catalogue with incorrect information. Desynchronization between catalogue and SEs.
1	FTS	High	No data transfer with other Tier-1s and Tier-2s in the same cloud.
1	VObox	High	DDM site services don't run. No access to whole cloud data information. Production jobs stop or leave the catalogue with incorrect information. Desynchronization between catalogue and SEs.
LPSC Grenoble	AMI database	High	Physics metadata and event provenance unavailable.



Moderate: CERN Services

Tier	Service	Criticality	Consequences of service interruption
0-1	3D streaming	Moderate	No export of database data. Backlog can be transferred as soon as connections are resumed.
0	Log file server	Moderate	Transfer of log files stops.
0	gLite WMS	Moderate	Switch to other WMS instances (if existing) or bypass (losing functionality).
0	SRM and SE	Moderate	No access to local data.
0	CE (CAF)	Moderate	No jobs run; running jobs may crash.
0	CVS server	Moderate	Software development and nightly builds stop.
0	AFS Servers	Moderate	Software development and nightly builds stop.
0	Build and RTT system	Moderate	Nightly builds stop. No validation of new software. No patching of offline/HLT software used in online



Moderate: Distributed Services

Tier	Service	Criticality	Consequences of service interruption
1	Oracle database RAC	Moderate	Switch to using Oracle database at another Tier-1.
1	SRM and SE	Moderate	No access to local data.
1	CE	Moderate	No jobs run; running jobs may crash.
2	SRM and SE	Moderate	No access to local data.
2	CE	Moderate	No jobs run; running jobs may crash.
LPSC Grenoble	Tag Collector	Moderate	Software development severely impeded. Build system stops.