

# SLA changes for the second year

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- **Nothing much is changing; this is primarily a dissemination exercise!**
  - Clarify/simplify the downtime declaration rules
  - Ranking to be done by reliability
  - Service Level targets are here to stay!
  - Some new reports...

- **The accepted definition of reliability doesn't change:**  

$$R = \text{UP period} / (\text{KNOWN period} - \text{Scheduled Downtime})$$
- **The implementation has been corrected to not add GOCDB unscheduled downtimes to scheduled ones!**
  - => Only ***scheduled*** downtimes will help to boost reliability compared to availability
- **Hence the importance of correctly declaring scheduled downtimes, using simplified rules!**
- **Remember the basic definitions:**
  - Scheduled interventions: planned and agreed in advance
  - Unscheduled interventions: unplanned, usually triggered by an unexpected failure

- **All downtimes that are declared with fewer than 24 hours' warning are unscheduled**
- **For gridops tools, all downtimes that are declared with fewer than 5 working days' warning are unscheduled**
- **Unscheduled downtimes can be declared up to 48 hours in the past (retroactive information to the user community)**
- **Existing Scheduled downtimes can be extended provided that it's done 24 hours in advance**  
(and no, unscheduled downtimes cannot be turned into scheduled ones after 24 hours 😊)
- **Downtimes will be announced when they are declared**
- **Downtimes will be re-announced 1 hour prior to their start**

- **Reasons given for downtimes now collected in reports**
  - Downtimes can be declared retro-actively to inform the user community (and get the information included in reports)
  - Site administrators should provide meaningful comments! (“reason” field when declaring downtime in GOCDB)

### Details for site CN-BEIJING-PKU

Region : AsiaPacific      Phy. CPU : N/A      Log. CPU : N/A      KSI2K :-0  
 Availability : **2 %**      Reliability : **2 %**      Unknown : **0 %**      Sch. Down : **6 %**      Unsch. Down : **91 %**

Sr. No.	Downtimes for site CN-BEIJING-PKU		
1	<b>UNSCHEDULED</b>	Mon, 6 Jul 2009 19:51 to Wed, 8 Jul 2009 19:51	( 2 Days )
	Declared on :	Mon, 6 Jul 2009 19:54	
	Entire Site :	unscheduled time	

- Example of good declaration (but note reliability calculation bug):

### Details for site e-ca-iaa

Region : SouthWesternEurope      Phy. CPU : 1      Log. CPU : 4      KSI2K : 0

Availability : 53 %      Reliability : 69 %      Unknown : 0 %      Sch. Down : 23 %      Unsch. Down : 24 %

Sr. No.	Downtimes for site e-ca-iaa			
1	<b>UNSCHEDULED</b>	Fri, 10 Jul 2009 13:31	to Fri, 17 Jul 2009 13:31	( 7 Days )
	Declared on :	Fri, 10 Jul 2009 13:36		
	Entire Site : Power off due to breakdown of the air conditioner			

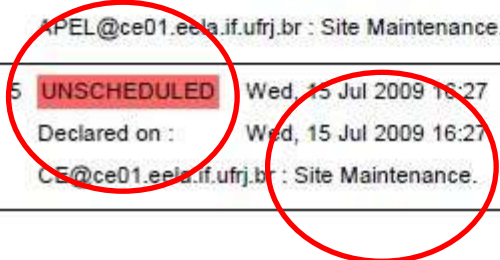
- Example of bad planning:

**Details for site UFRJ-IF**

Region : CERN      Phy. CPU : 240      Log. CPU : 240      KSI2K : 318

Availability : **57 %**      Reliability : **59 %**      Unknown : **0 %**      Sch. Down : **4 %**      Unsch. Down : **35 %**

Sr. No.	Downtimes for site UFRJ-IF		
1	<b>UNSCHEDULED</b>	Fri, 3 Jul 2009 13:04 to Fri, 3 Jul 2009 17:40	( 4 Hrs 36 Mins )
	Declared on :	Fri, 3 Jul 2009 13:05	
	APEL@ce01.eela.if.ufrj.br : We are changing the CE hardware.		
2	<b>UNSCHEDULED</b>	Fri, 3 Jul 2009 13:04 to Fri, 3 Jul 2009 17:40	( 4 Hrs 36 Mins )
	Declared on :	Fri, 3 Jul 2009 13:05	
	CE@ce01.eela.if.ufrj.br : We are changing the CE hardware.		
3	<b>UNSCHEDULED</b>	Thu, 9 Jul 2009 14:00 to Fri, 10 Jul 2009 14:00	( 1 Days )
	Declared on :	Thu, 9 Jul 2009 14:01	
	Entire Site : Network failure.		
4	<b>UNSCHEDULED</b>	Wed, 15 Jul 2009 16:27 to Wed, 15 Jul 2009 17:27	( 1 Hrs )
	Declared on :	Wed, 15 Jul 2009 16:27	
	APEL@ce01.eela.if.ufrj.br : Site Maintenance.		
5	<b>UNSCHEDULED</b>	Wed, 15 Jul 2009 16:27 to Wed, 15 Jul 2009 17:27	( 1 Hrs )
	Declared on :	Wed, 15 Jul 2009 16:27	
	CE@ce01.eela.if.ufrj.br : Site Maintenance.		





- **Try and identify areas that cause problems for sites**
- **The goal is to encourage sites to adopt good practices when delivering IT services**
- **Change Management:**
  - Prepare a plan (e.g. preventive maintenance on servers)
  - Get approval (Change Advisory Board)
  - Schedule downtimes correctly; Implement plan
  - Review (did everything go to plan, what could have been done better?)
- **Think customer – i.e. grid users!**
  - Make sure that they're informed of what's going on
  - Announce interventions in advance (easy if you plan ahead!)
- **The simplified EGEE intervention procedures are an attempt to provide clear rules that are applicable to all, and that are easy to understand!**



- **Need to start looking at performance when dealing with trouble-tickets (how quickly support groups acknowledge tickets & find solutions, how quickly sites react...)**
- **Stop insisting on SLA signatures (by-product of EU Review recommendation)**
  - Agreeing to the (SL)Agreement should be part of the site certification process.
  - Rank by reliability (encourage the declaration of downtimes)
- **Become stricter with poorly performing sites**
  - Suggestion is to remove those with <25% availability in 3 consecutive months (should we be stricter? – 50%?)
- **Availability reports per VO, based on ops tests**
  - Simply select the sites that support a particular VO



## EGEE Availability Report for VO Biomed

Region Summary - Sorted by Availability

August 2009

Data from SAM and Gridview

[https://twiki.cern.ch/twiki/pub/LCG/GridView/Gridview\\_Service\\_Availability\\_Computation.pdf](https://twiki.cern.ch/twiki/pub/LCG/GridView/Gridview_Service_Availability_Computation.pdf)

Availability = Uptime / (Total time - Time\_status\_was\_UNKNOWN)  
 Reliability = Uptime / (Total time - Scheduled Downtime - Time\_status\_was\_UNKNOWN)  
 KSI2K : Installed capacity of the site measured in kilo specint 2000 (KSI2K)  
 Reliability and Availability for Region - Weighted average of sites in the Region (supporting this VO) based on installed capacity

Colour coding :            N/A    < 30%    < 60%    < Target    >= Target

EGEE SLA Availability Target is 70 % and Reliability Target is 75 %

Region	Avail-ability	Reli-ability
AsiaPacific	98 %	98 %
GermanySwitzerland	98 %	98 %
CentralEurope	98 %	98 %
France	97 %	99 %
Russia	93 %	93 %
SouthEasternEurope	93 %	94 %
CERN	92 %	99 %
Italy	91 %	93 %
SouthWesternEurope	91 %	98 %
UKI	89 %	94 %
NorthernEurope	77 %	85 %

