Site Readiness

PADA meeting

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PADA meeting – 12th March 2009

Downtimes from SAM/Gridview I

- **Now we have better Downtimes/Maintenance tracking:**
  - From SAM/Gridview database. No parsing GOCDB/OIM URLs anymore.
  - Consider services that have at least one critical test defined: CE and SRMv2.
  - Track services specific for CMS.
  - Only services in which we have run test last 30 days included.
  - **Full-Maintenance** when all instances of a service are in maintenance. Only some of instances in downtime → the site will be in **warning**.

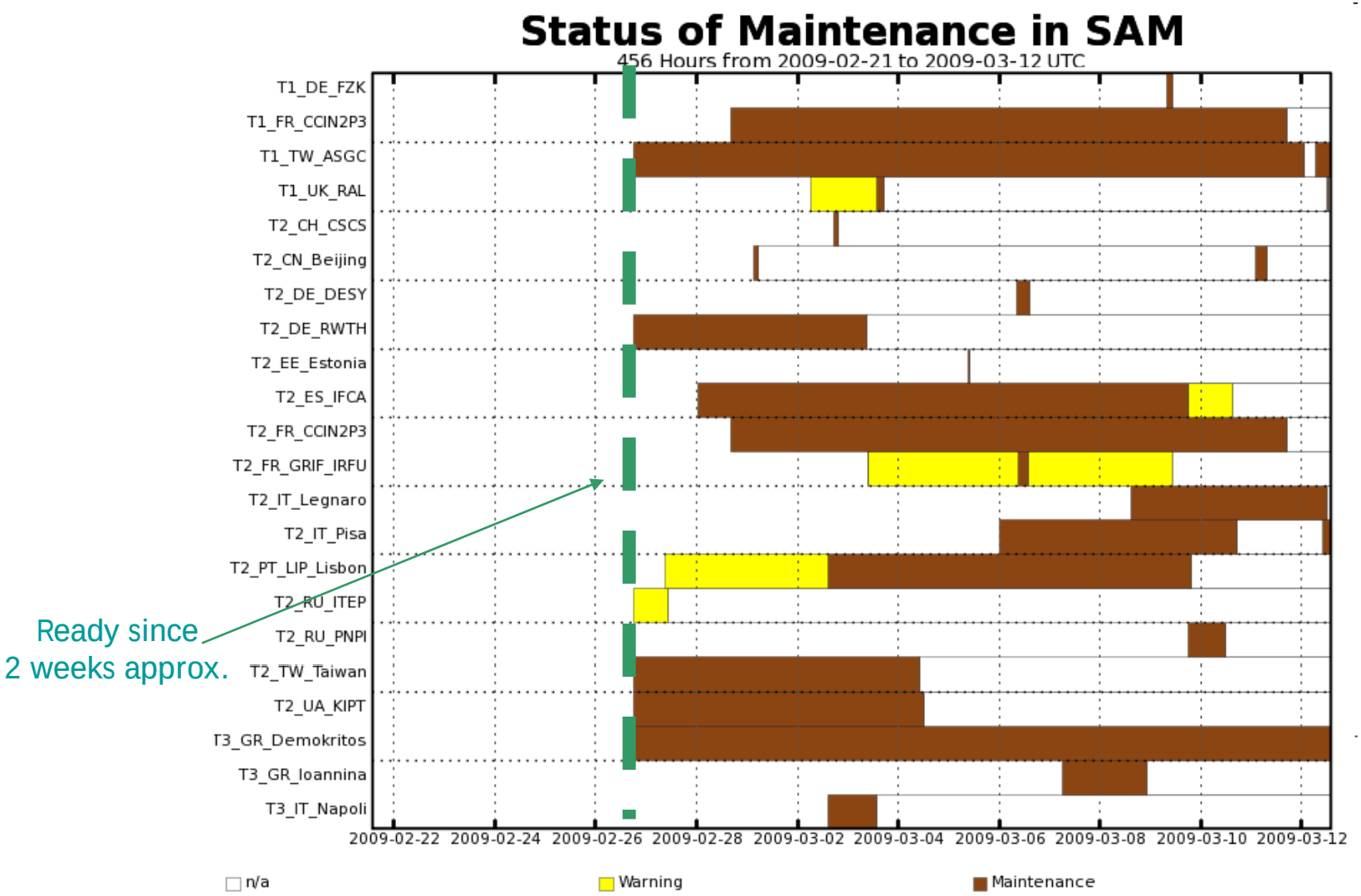
SSB →

Maintenace View

Site Name	GOC downtime	OSG downtime	Maintenance (expand this column)	CIC downtime	Savannah	Savannah manual	Under investigatio	Maintenance in SAM
T0_CH_CERN	n/a	n/a	GOCDB	n/a	n/a	open ticket		n/a
T1_DE_FZK	n/a	n/a	GOCDB	n/a	2 tickets	n/a	ma	SRMv2 in maint.
T1_ES_PIC	n/a	n/a	GOCDB	n/a	n/a	open ticket		n/a
T1_FR_CCIN2P3	n/a	n/a	GOCDB	n/a	3 tickets	n/a		CE in maint.
T1_IT_CNAF	n/a	n/a	GOCDB	n/a	2 tickets	n/a	ma	n/a
T1_TW_ASGC	n/a	n/a	GOCDB	n/a	2 tickets	open ticket	open tick	All services in maint
T1_UK_RAL	n/a	n/a	GOCDB	n/a	2 tickets	n/a	open tick	n/a
T1_US_FNAL	n/a	n/a	OIM	n/a	1 tickets	n/a		n/a
T2_AT_Vienna	n/a	n/a	GOCDB	n/a	n/a	n/a		n/a
T2_BE_IIHE	n/a	n/a	GOCDB	n/a	1 tickets	n/a		n/a
T2_BE_UCL	n/a	n/a	GOCDB	n/a	1 tickets	n/a		n/a
T2_BR_SPRACE	n/a	n/a	OIM	n/a	n/a	n/a		n/a
T2_BR_UERJ	n/a	n/a	OIM	n/a	1 tickets	n/a		n/a
T2_CH_CSCS	n/a	n/a	GOCDB	n/a	n/a	n/a		n/a
T2_CN_Beijing	n/a	n/a	GOCDB	n/a	1 tickets	n/a		n/a
T2_DE_DESY	n/a	n/a	GOCDB	n/a	n/a	n/a		n/a
T2_DE_RWTH	n/a	n/a	GOCDB	n/a	n/a	n/a	ma	n/a
T2_EE_Estonia	n/a	n/a	GOCDB	n/a	n/a	n/a		n/a
T2_ES_CIEMAT	n/a	n/a	GOCDB	n/a	1 tickets	n/a		n/a
T2_FR_IFCA	n/a	n/a	GOCDB	n/a	n/a	n/a	ma	CE in maint.
T2_FI_HIP	n/a	n/a	GOCDB	n/a	n/a	n/a	ma	n/a
T2_FR_CCIN2P3	n/a	n/a	GOCDB	n/a	n/a	n/a	ma	All services in maint
T2_FR_GRIF_IRFU	n/a	n/a	GOCDB	n/a	n/a	open ticket		Some CE in maint.
T2_FR_GRIF_LLR	n/a	n/a	GOCDB	n/a	n/a	n/a	ma	n/a
T2_FR_IPHC	n/a	n/a	GOCDB	n/a	1 tickets	n/a	ma	n/a
T2_HU_Budapest	n/a	n/a	GOCDB	n/a	n/a	n/a		n/a

Downtimes from SAM/Gridview II

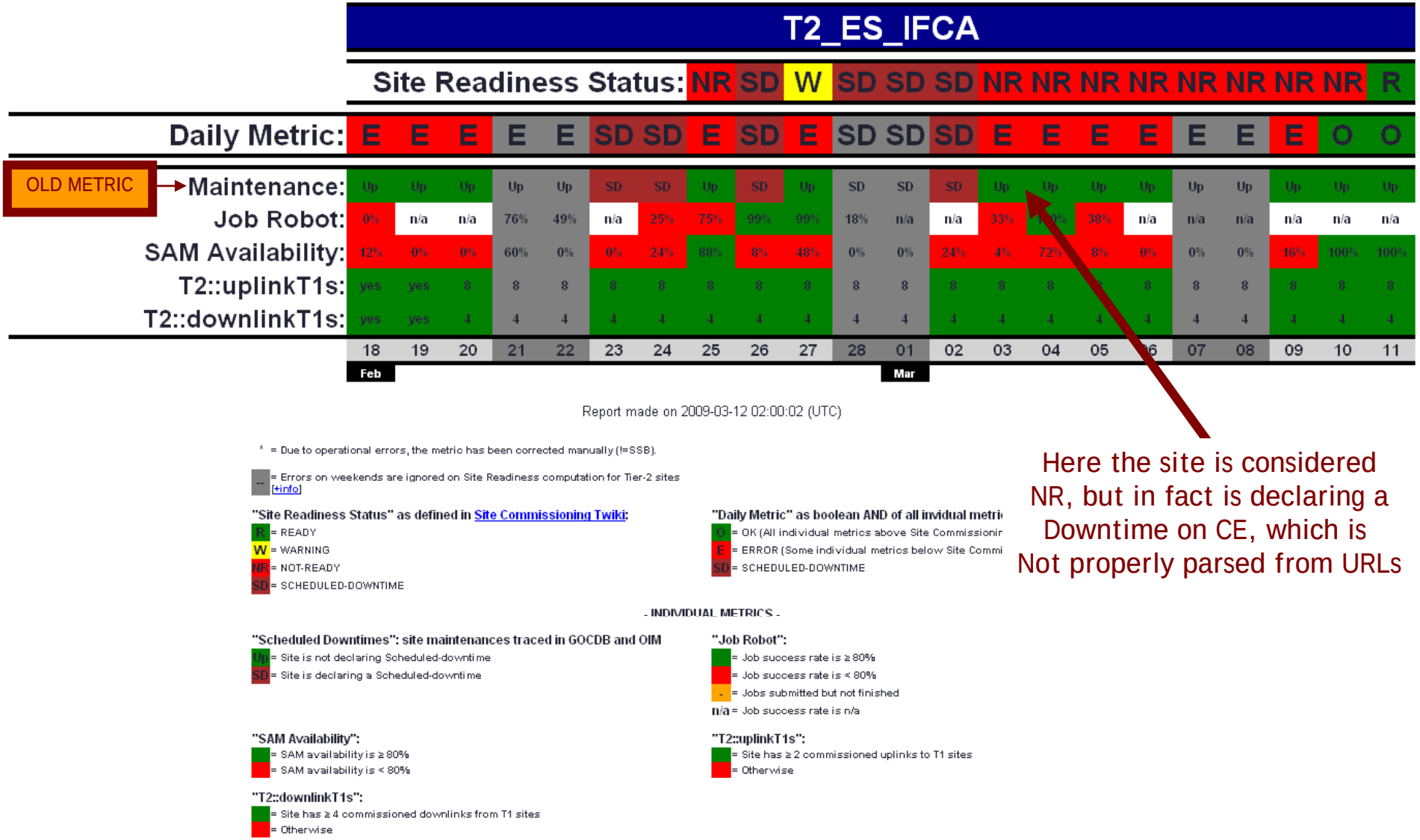
- **Now we have better Downtimes/Maintenance** tracking:



Ready since
2 weeks approx.

Downtimes from SAM/Gridview III

- **This has been integrated into Site Readiness tables**:



T2_ES_IFCA

Site Readiness Status:	NR	SD	W	SD	SD	SD	NR	NR	NR	NR	NR	NR	NR	NR	R								
Daily Metric:	E	E	E	E	E	SD	SD	E	SD	E	SD	SD	SD	E	E	E	E	E	E	E	O	O	
Maintenance:	Up	Up	Up	Up	Up	SD	SD	Up	SD	Up	SD	SD	SD	Up	Up	Up	Up	Up	Up	Up	Up	Up	
Job Robot:	0%	n/a	n/a	76%	49%	n/a	25%	75%	99%	99%	18%	n/a	n/a	33%	0%	38%	n/a	n/a	n/a	n/a	n/a	n/a	
SAM Availability:	12%	0%	0%	60%	0%	0%	24%	88%	8%	48%	0%	0%	24%	4%	72%	8%	0%	0%	0%	16%	100%	100%	
T2::uplinkT1s:	yes	yes	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
T2::downlinkT1s:	yes	yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	18	19	20	21	22	23	24	25	26	27	28	01	02	03	04	05	06	07	08	09	10	11	
	Feb											Mar											

OLD METRIC

Here the site is considered NR, but in fact is declaring a Downtime on CE, which is Not properly parsed from URLs

Report made on 2009-03-12 02:00:02 (UTC)

* = Due to operational errors, the metric has been corrected manually (!=SSB).

-- = Errors on weekends are ignored on Site Readiness computation for Tier-2 sites [+info]

"Site Readiness Status" as defined in Site Commissioning Twiki:
R = READY
W = WARNING
NR = NOT-READY
SD = SCHEDULED-DOWNTIME

"Daily Metric" as boolean AND of all invidual metri
O = OK (All individual metrics above Site Commissionir
E = ERROR (Some individual metrics below Site Commi
SD = SCHEDULED-DOWNTIME

- INDIVIDUAL METRICS -

"Scheduled Downtimes": site maintenances traced in GOCDB and OIM
Up = Site is not declaring Scheduled-downtime
SD = Site is declaring a Scheduled-downtime

"Job Robot":
= Job success rate is ≥ 80%
= Job success rate is < 80%
- = Jobs submitted but not finished
n/a = Job success rate is n/a

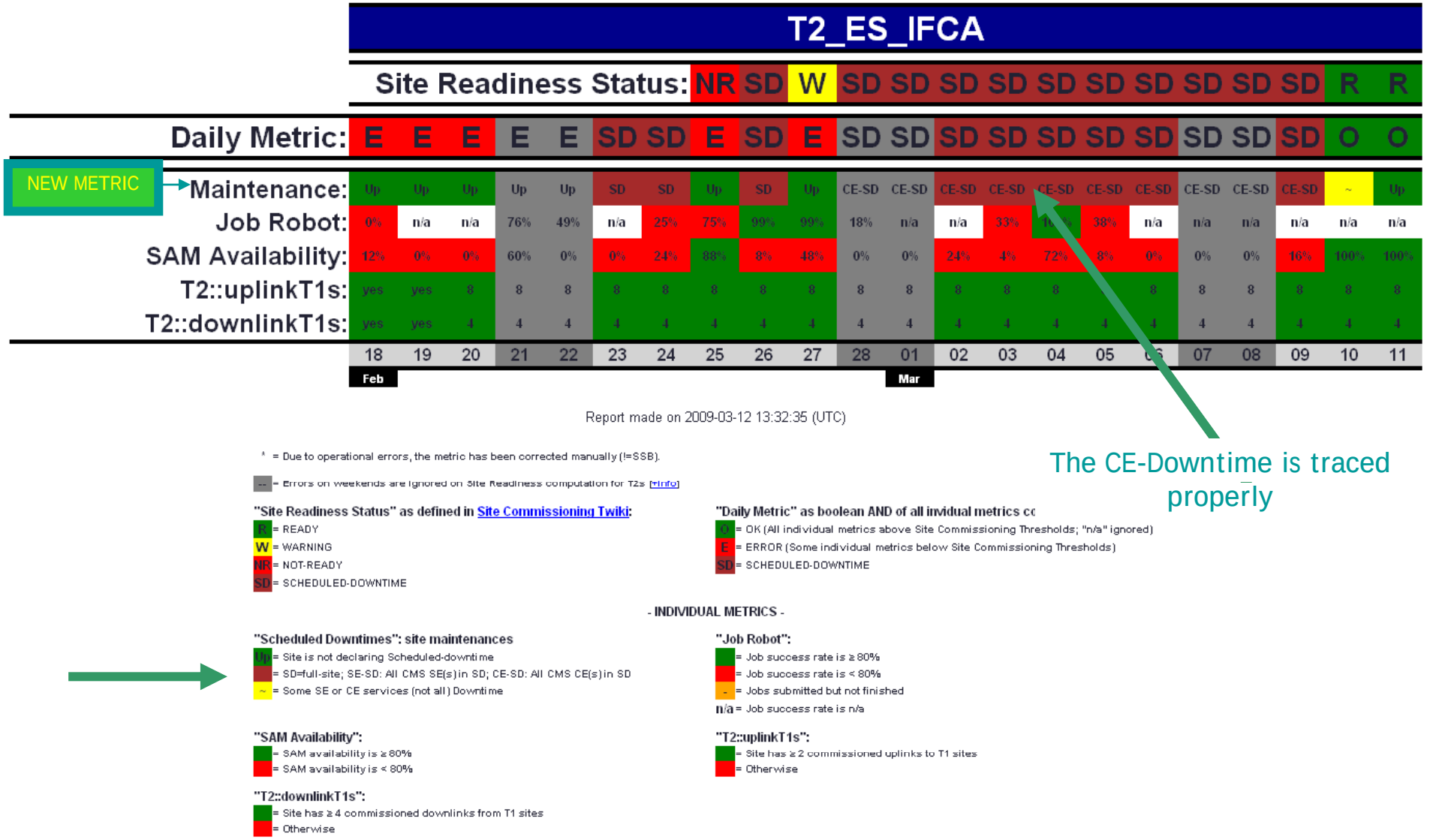
"SAM Availability":
= SAM availability is ≥ 80%
= SAM availability is < 80%

"T2::uplinkT1s":
= Site has ≥ 2 commissioned uplinks to T1 sites
= Otherwise

"T2::downlinkT1s":
= Site has ≥ 4 commissioned downlinks from T1 sites
= Otherwise

Downtimes from SAM/Gridview IV

- **This has been integrated into Site Readiness tables**:



T2_ES_IFCA

Site Readiness Status:	NR	SD	W	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	R	R	
Daily Metric:	E	E	E	E	E	SD	SD	E	SD	E	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	O	O	
Maintenance:	Up	Up	Up	Up	Up	SD	SD	Up	SD	Up	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	CE-SD	~	Up	
Job Robot:	0%	n/a	n/a	76%	49%	n/a	25%	75%	99%	99%	18%	n/a	n/a	33%	1[illegible]%	38%	n/a	n/a	n/a	n/a	n/a	n/a	
SAM Availability:	12%	0%	0%	60%	0%	0%	24%	88%	8%	48%	0%	0%	24%	4%	72%	8%	0%	0%	0%	16%	100%	100%	
T2::uplinkT1s:	yes	yes	8	8	8	8	8	8	8	8	8	8	8	8	8		8	8	8	8	8	8	
T2::downlinkT1s:	yes	yes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	18	19	20	21	22	23	24	25	26	27	28	01	02	03	04	05	[illegible]	07	08	09	10	11	
	Feb											Mar											

NEW METRIC

Report made on 2009-03-12 13:32:35 (UTC)

* = Due to operational errors, the metric has been corrected manually (!=SSB).

-- = Errors on weekends are ignored on Site Readiness computation for T2s [+Info]

"Site Readiness Status" as defined in Site Commissioning Twiki:
- R = READY
- W = WARNING
- NR = NOT-READY
- SD = SCHEDULED-DOWNTIME

"Daily Metric" as boolean AND of all invidual metrics co
- O = OK (All individual metrics above Site Commissioning Thresholds; "n/a" ignored)
- E = ERROR (Some individual metrics below Site Commissioning Thresholds)
- SD = SCHEDULED-DOWNTIME

- INDIVIDUAL METRICS -

"Scheduled Downtimes": site maintenances
- Up = Site is not declaring Scheduled-downtime
- = SD=full-site; SE-SD: All CMS SE(s) in SD; CE-SD: All CMS CE(s) in SD
- ~ = Some SE or CE services (not all) Downtime

"Job Robot":
- = Job success rate is ≥ 80%
- = Job success rate is < 80%
- - = Jobs submitted but not finished
- n/a = Job success rate is n/a

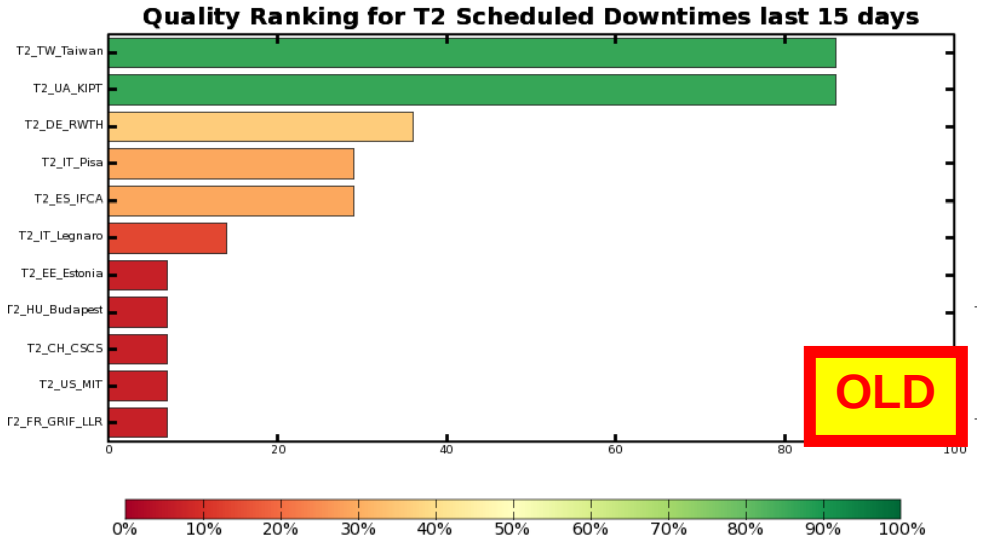
"SAM Availability":
- = SAM availability is ≥ 80%
- = SAM availability is < 80%

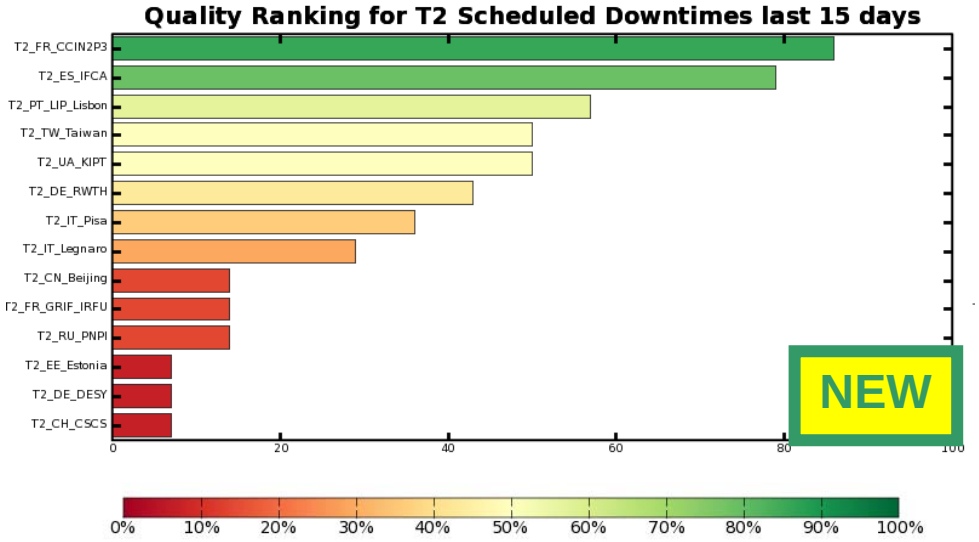
"T2::uplinkT1s":
- = Site has ≥ 2 commissioned uplinks to T1 sites
- = Otherwise

"T2::downlinkT1s":
- = Site has ≥ 4 commissioned downlinks from T1 sites
- = Otherwise

The CE-Downtime is traced properly

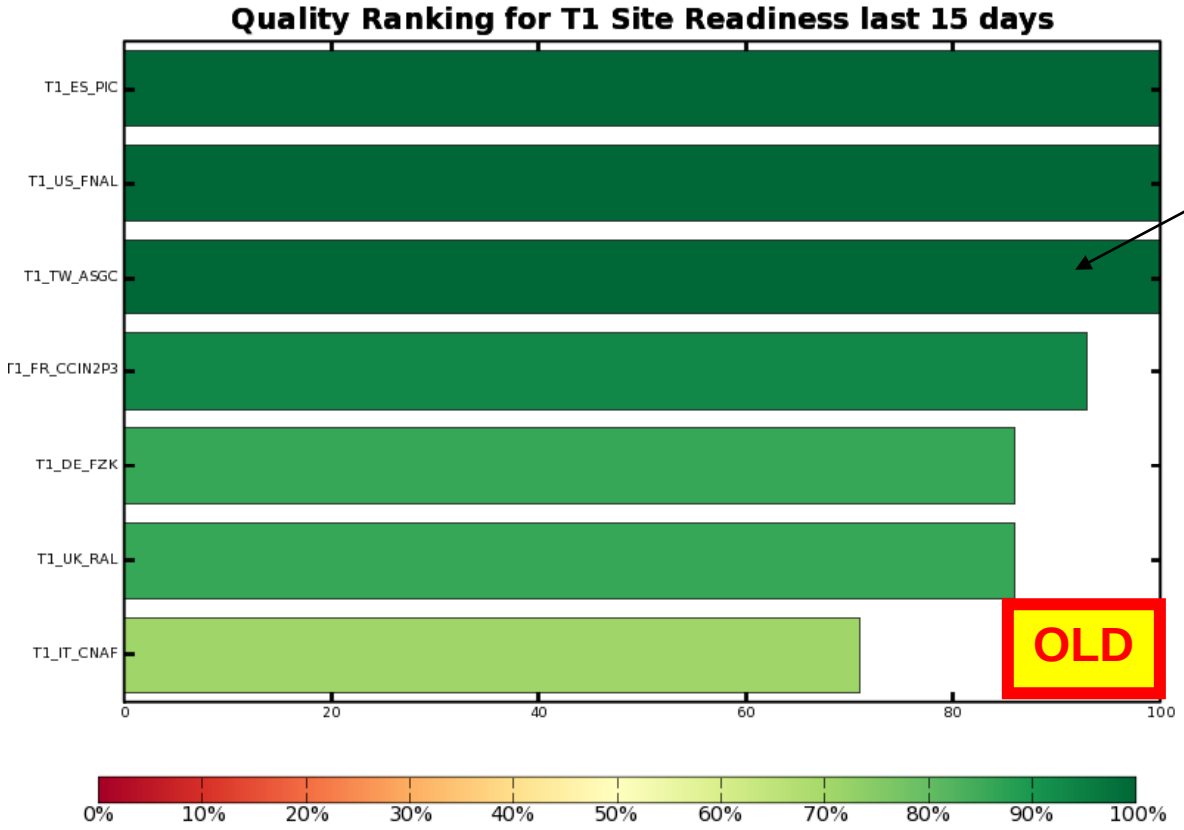
Downtimes from SAM/Gridview V

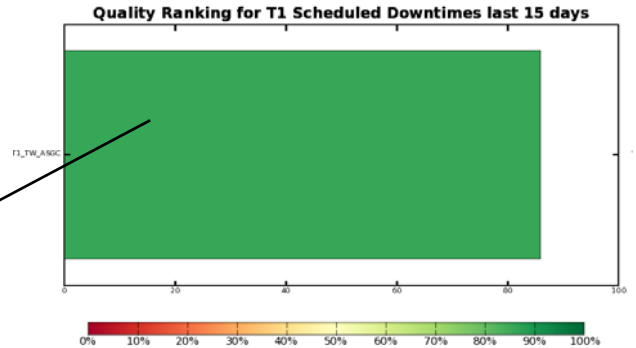




Downtimes from SAM/Gridview VI

- **A site in SD more than 75% last 15 days, are not included on Site Readiness Reports, to avoid something like:**

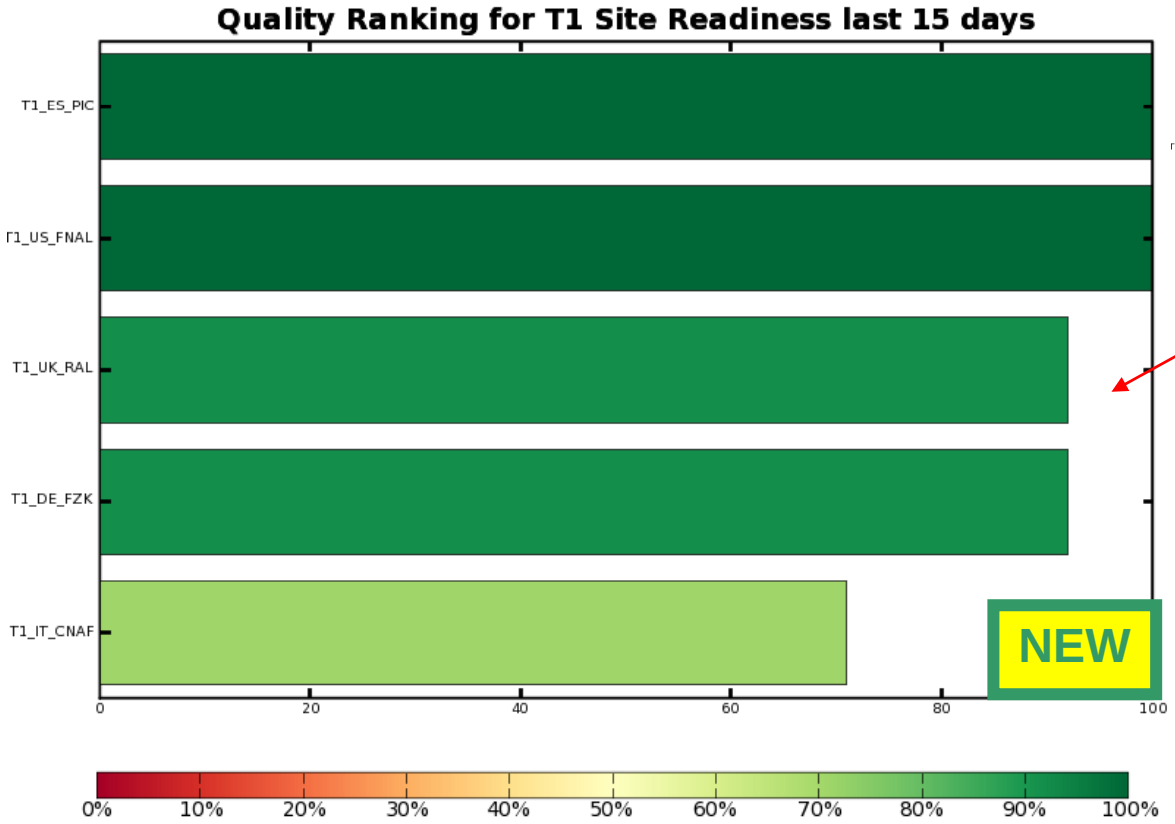


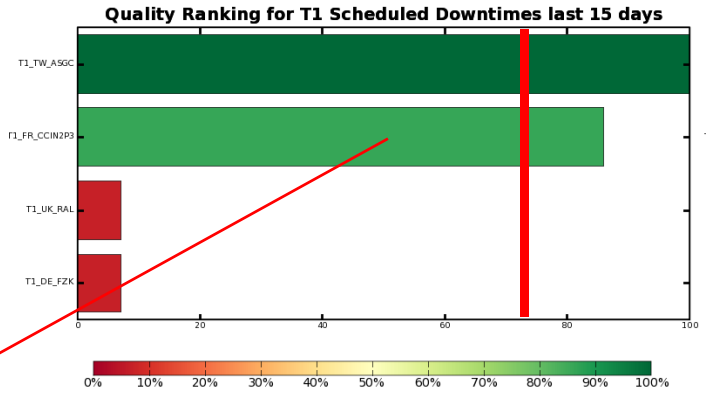


AGSC Is in SD due to fire incident, before was OK, and the plot shows that…

Downtimes from SAM/Gridview VII

- **A site in SD more than 75% last 15 days, are not included on Site Readiness Reports, to avoid something like:**



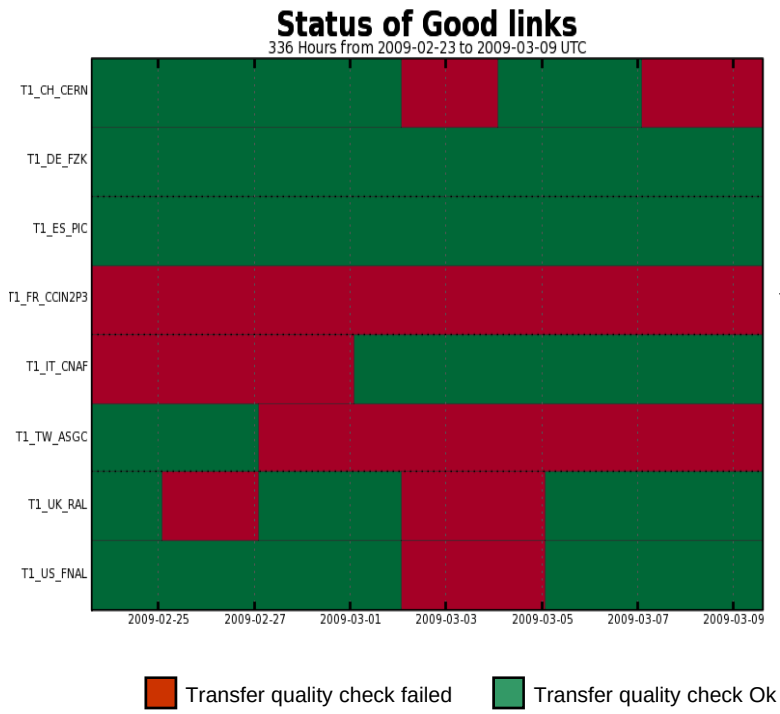


More Downtimes traced (from SAM)

Checking the Link Transfer Qualities I

- **Check of transfer qualities ('good links')**
  - **Low rate traffic in Debug instance running on all Production enabled links.**
  - **Both Production/Debug transfers are added and quality/link is checked.**
  - **If a site does not have Prod transfers, only Debug transfers count, so:**

IMPORTANT
- ➢ **Agents should run on Debug instance**
- ➢ **They shall accept all DDT-commissioned links**



Number of good links per site

Links are classified as follows:

link from T0	the downlink from CERN
links from T1	for Tier-1 sites, the incoming links from other Tier-1 sites; for Tier-2 sites, the downlinks from Tier-1 sites
links to T1	for Tier-1 sites, the outgoing links to other Tier-1 sites; for Tier-2 sites, the uplinks to Tier-1 sites
links to T2	for Tier-1 sites, the downlinks to Tier-2 sites

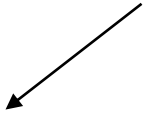
Links are counted only if they have a quality better than **50%** in the previous day. These are the minimum numbers of links per type:

	Tier-1	Tier-2
link from T0	1	
links from T1	2	2
links to T1	2	1
links to T2	10	

As we do apply <u>fixed cuts</u>, then if a site is not having Debug transfers it would be penalized
(see later for a solution)

Checking the Link Transfer Qualities II

- Agents should run on Debug instance
- They shall accept all DDT-commissioned links



- **We implemented a check for this:**
  - **We parse http://cmsweb.cern.ch/phedex/debug/Components::Links**
  - **We take all links that are enabled in Production (from TMDB) and look for their state:**
    - **Link is Down (because Source/Destination agents)**
    - **Link is excluded (either in Source/Destination agents)**
  - **Filter out those sites declaring a Downtime (they are expected to shutdown agents, in most cases)**
  - **We only show links with problems >24h.**
  - **Then we order the problems (Source/Destination) and provide a list of sites and links which are affected.**
  - **Note that Agents down for more than 3 days are not shown in: http://cmsweb.cern.ch/phedex/debug/Components::Status which is kept as a dynamic status link.**

Checking the Link Transfer Qualities III

```
##########################################################################################################
#
# T1 and T2 sites with FileDownload and/or FileExport down for more than 24h
# Additionally, all links which are affected are listed, as well as excluded links.
# Only DDT-commissioned links are considered.
#
# Sites with declared downtimes are listed and filtered.
#
# PhEDEx instance: debug
# Links Enabled in Production: 534 (of a total of 850)
#
# Report generated Thu Mar 12 14:10:01 CET 2009 (jflix at pic.es)
#
##########################################################################################################
#
# Sites with declared Downtimes (SSB column "Maintenance from SAM")
# Downtime Report made on 2009-03-12 13:00:01 (UTC)
#
T1_TW_ASGC : All services in maint
T2_IT_Pisa : SRMv2 in maint.
#
#
# Sites affected:
#
T2_PT_LIP_Coimbra
T2_TW_Taiwan
T2_US_MIT
T2_US_Nebraska
#
# Links affected: 35
#
T2_PT_LIP_Coimbra : T1_CH_CERN_Buffer_to_T2_PT_LIP_Coimbra_red:_Destination_agent_down_-_Destination_update:_62d21h08
T2_PT_LIP_Coimbra : T1_ES_PIC_Buffer_to_T2_PT_LIP_Coimbra_red:_Destination_agent_down_-_Destination_update:_62d21h08
T2_PT_LIP_Coimbra : T2_PT_LIP_Coimbra_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_62d18h07
T2_PT_LIP_Coimbra : T2_PT_LIP_Coimbra_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_62d18h07
T2_TW_Taiwan : T1_CH_CERN_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_DE_FZK_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_ES_PIC_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_FR_CCIN2P3_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_IT_CNAF_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_UK_RAL_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T1_US_FNAL_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h33
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_15d4h53
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_IT_CNAF_Buffer_red:_Source_agent_down_-_Source_update:_15d4h53
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_US_FNAL_Buffer_red:_Source_agent_down_-_Source_update:_15d4h53
T2_US_MIT : T1_CH_CERN_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_DE_FZK_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_ES_PIC_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_FR_CCIN2P3_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_IT_CNAF_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_UK_RAL_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T1_US_FNAL_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T2_ES_IFCA_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T2_FR_GRIF_LLR_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_MIT : T2_US_MIT_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_MIT : T2_US_MIT_to_T1_US_FNAL_Buffer_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_MIT : T2_US_MIT_to_T2_ES_IFCA_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_MIT : T2_US_MIT_to_T2_FR_GRIF_LLR_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_MIT : T2_US_MIT_to_T2_US_UCSD_red:_Source_agent_down_-_Source_update:_1d19h04
T2_US_Nebraska : T2_US_Nebraska_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_19d22h18
T2_US_Nebraska : T2_US_Nebraska_to_T1_IT_CNAF_Buffer_red:_Source_agent_down_-_Source_update:_19d22h18
T2_US_Nebraska : T2_US_Nebraska_to_T2_US_UCSD_red:_Source_agent_down_-_Source_update:_19d22h18
```

http://lhcweb.pic.es/cms/Misc/LinkStatus_debug.txt

(re-created each hour)

Sites to be warned

Checking the Link Transfer Qualities IV

```
#################################################################################################################
#
# T1 and T2 sites with FileDownload and/or FileExport down for more than 2h
# .
#
# PhEDEx instance: prod
# Links Enabled in Production: 534 (of a total of 850)
#
# Report generated Thu Mar 12 14:05:04 CET 2009 (jflix at pic.es)
#
#################################################################################################################
#
# Sites with declared Downtimes (SSB column "Maintenance from SAM")
# Downtime Report made on 2009-03-12 13:00:01 (UTC)
#
T1_TW_ASGC : All services in maint
T2_IT_Pisa : SRMv2 in maint.
#
#
# Sites affected:
#
T2_PT_LIP_Coimbra
T2_RU_IHEP
T2_RU_JINR
T2_RU_SINP
T2_TW_Taiwan
T2_US_MIT
T2_US_Nebraska
#
# Links affected: 41
#
T2_PT_LIP_Coimbra : T1_CH_CERN_Buffer_to_T2_PT_LIP_Coimbra_red:_Destination_agent_down_-_Destination_update:_62d21h03
T2_PT_LIP_Coimbra : T1_ES_PIC_Buffer_to_T2_PT_LIP_Coimbra_red:_Destination_agent_down_-_Destination_update:_62d21h03
T2_PT_LIP_Coimbra : T2_PT_LIP_Coimbra_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_62d18h02
T2_PT_LIP_Coimbra : T2_PT_LIP_Coimbra_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_62d18h02
T2_RU_IHEP : T2_RU_IHEP_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_2h15
T2_RU_JINR : T2_RU_JINR_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_2h06
T2_RU_SINP : T2_RU_SINP_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_2h02
T2_TW_Taiwan : T1_CH_CERN_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_DE_FZK_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_ES_PIC_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_FR_CCIN2P3_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_IT_CNAF_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_UK_RAL_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T1_US_FNAL_Buffer_to_T2_TW_Taiwan_red:_Destination_agent_down_-_Destination_update:_15d4h28
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_15d4h48
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_IT_CNAF_Buffer_red:_Source_agent_down_-_Source_update:_15d4h48
T2_TW_Taiwan : T2_TW_Taiwan_to_T1_US_FNAL_Buffer_red:_Source_agent_down_-_Source_update:_15d4h48
T2_US_MIT : T1_CH_CERN_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_DE_FZK_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_ES_PIC_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_FR_CCIN2P3_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_IT_CNAF_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_UK_RAL_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T1_US_FNAL_Buffer_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T2_ES_IFCA_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T2_FR_GRIF_LLR_to_T2_US_MIT_red:_Destination_agent_down_-_Destination_update:_1d18h54
T2_US_MIT : T2_US_MIT_to_T1_CH_CERN_Buffer_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T1_US_FNAL_Buffer_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T2_ES_IFCA_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T2_FR_GRIF_LLR_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_MIT : T2_US_MIT_to_T2_US_UCSD_red:_Source_agent_down_-_Source_update:_1d18h59
T2_US_Nebraska : T2_US_Nebraska_to_T1_ES_PIC_Buffer_red:_Source_agent_down_-_Source_update:_19d22h13
T2_US_Nebraska : T2_US_Nebraska_to_T1_IT_CNAF_Buffer_red:_Source_agent_down_-_Source_update:_19d22h13
T2_US_Nebraska : T2_US_Nebraska_to_T2_US_UCSD_red:_Source_agent_down_-_Source_update:_19d22h13
```

If we apply this in Prod (for problems >2h)…

http://lhcweb.pic.es/cms/Misc/LinkStatus_prod.txt

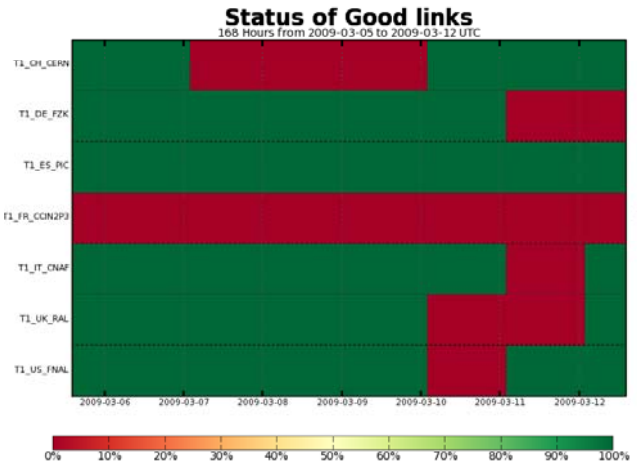
(re-created each hour)

Sites to be warned, as some of them run the agents but they do not allow enabled links to transfer data in Prod

T2_US_MIT	DOWN (1d19h58 ago) (0/2 agents)	DOWN (1d20h03 ago)		DOWN (1d20h00 ago)	
T2_US_Nebraska	UP	UP (0h45 ago)		UP	UP

Checking the Link Transfer Qualities V

- **Once this is in place, we will check transfer qualities on all commissioned links (enabled in Prod):**
  - **For this we have Prod + Debug transfers, but a site can switch OFF Debug agents for a day, then it shouldn't be penalize:**



Links are counted only if they have a quality better than **50%** in the previous day. These are the minimum numbers of links per type:

	Tier-1	Tier-2
link from T0	1	
links from T1	2	2
links to T1	2	1
links to T2	10	

  - **For example, CNAF did it recently, and failed the metric.**

- **CHANGE (soon): we will consider OK if:**

"Links are counted only if they have a quality better than 50% in the previous day. We require that at least half of them satisfy the metric"

Site Readiness Task Force Mandate I

You are here: TWiki > CMS Web > SWIntegration > PADA > PADASiteCommissioning > SiteCommissioningTaskForceMandate

Site Commissioning Task Force Mandate Document

Goals

- Increase reliability of sites
- Determine what are the failures at sites and help sites to improve
- Assess the evolution of failure rates
- Understand the most common failure modes and see if they can be recovered automatically in some way
- Check if problems more related to unreliability of middleware/services or to site configuration/support
- Measure level of intrinsic unreliability of good sites (~20%?) due to intrinsic unreliability of Grid, site, CMS services

Deliverables:

- Report the evolution of this work in the bi-weekly PADA meeting
- Documentation of failure modes, solutions, recommendations
- Plots of failures rates and their evolution with time
- Measurement of intrinsic unreliability of good sites
- Recommendations for adapting DMWM software to handle expected failure modes
- Give feedback to WLCG on site reliability?

Techniques

- Mine logs from site commissioning tools to understand failures
- Document failure modes, solutions, recommendations
- Pro-actively report failures to sites and help them to improve
- Statistical analysis of site commissioning data (distribution of the various metrics, per site, as a function of time, averge numbers, etc)
- Run JobRobot in commissioning mode to stress sites and uncover failures modes, bottlenecks, etc

Time Scale

- Evaluate results after 3 months of kick off and assess if an extension of the task force is recommended

People

- Coordinators
  - Josep Flix, Andrea Sciaba
- Task Force Members
  - Please volunteer

-- JoseHernandez - 22 Jan 2009

Site Readiness Task Force Mandate II

- **FacOps encouraged Kejing Kang to participate with us on mandate tasks.**

- **Site Readiness coordinators to encourage her now. ;)**

  - **Some training to tools is needed.**
  - **We will start notifying stable sites on esporadic problems (Savannah – 2/3 tickets per day)**
  - **Use them to document failures, solutions & recommendations.**
  - **Provide plots of failures rates and their evolution with time.**
  - **She can start from here, to make a valuable contribution to the program.**

- **Statistical analysis of Site Readiness data (distribution of the various metrics, per site, as a function of time, averge numbers, etc):**

  - **Some progress, but we will move to ROOT for better analysis.**

Site Readiness % from Ranking plots to SSB

- **Soon on SSB and Summary Tables:**

2009-03-11 00:00:01	T1_DE_FZK	92	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_ES_PIC	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_FR_CCIN2P3	n/a	white	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_SD_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_IT_CNAF	71	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_TW_ASGC	n/a	white	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_SD_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_UK_RAL	92	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T1_US_FNAL	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T1_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_AT_Vienna	7	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_BE_IIHE	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_BE_UCL	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_BR_SPRACE	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_BR_UERJ	57	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_CH_CAF	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_CH_CSCS	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_CN_Beijing	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_DE_DESY	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_DE_RWTH	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_EE_Estonia	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_ES_CIEMAT	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_ES_IFCA	n/a	white	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_SD_perc_last15days_20090311.png
2009-03-11 00:00:01	T2_FI_HIP	100	color?	http://lhcweb.pic.es/cms/test3/SiteReadinessPlots/T2_R+Wcorr_perc_last15days_20090311.png

...
...

Site Readiness Monitoring Links

- **New monitoring links:**

https://twiki.cern.ch/twiki/bin/view/CMS/PADASiteCommissioning#ScMon

Monitoring

The following table collects all the monitoring pages related to the site commissioning.

Site Status Board	Production	Development

Commissioned links	Status

Job Robot	Calendar	Today	Job flow

Readiness summary	Last report

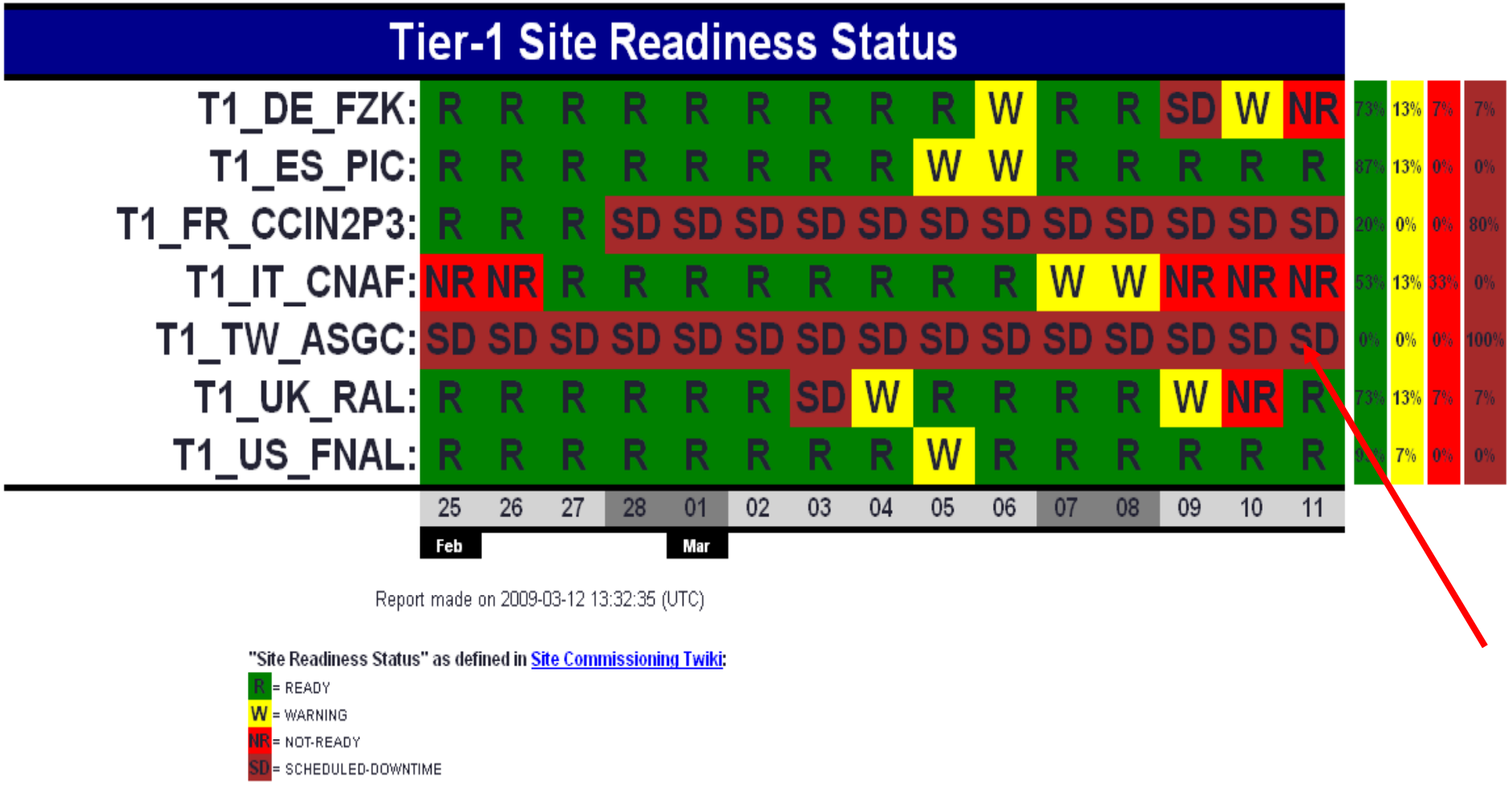
Readiness plots	Tier-1		Tier-2	
Quality ranking	Last 15 days	Last 30 days	Last 15 days	Last 30 days
Scheduled downtimes	Last 15 days	Last 30 days	Last 15 days	Last 30 days

Computing Week in San Diego

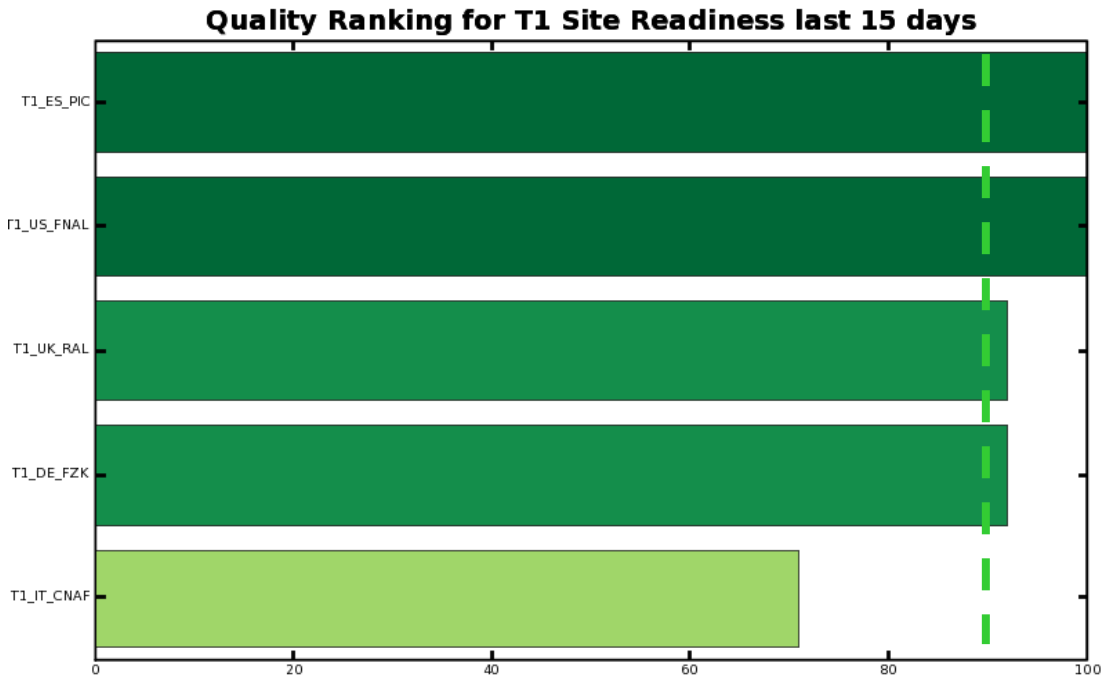
- **Items we could discuss at the Readiness Session:**

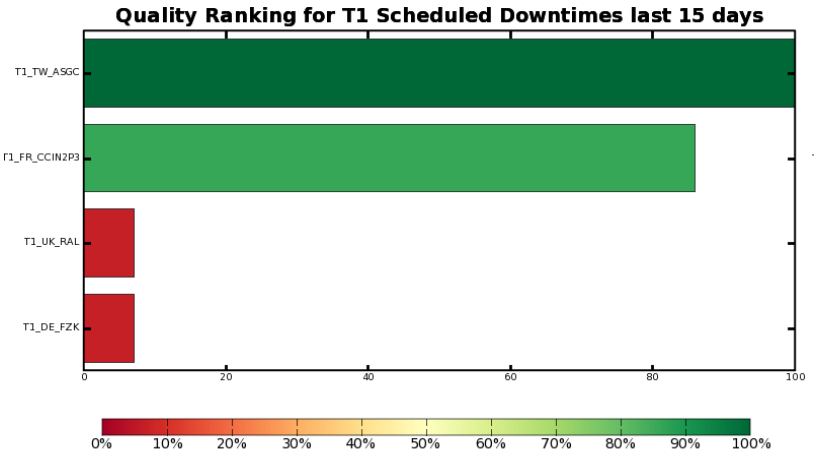
  - **Status of Site Readiness Program.**
  - **Site Readiness Task Force Results.**
  - **Use of the Readiness Program in Production Activities (DataOps).**
  - **Integrating Site Readiness into Computing Shifts (FacOps).**
  - **Future implementations and directions.**

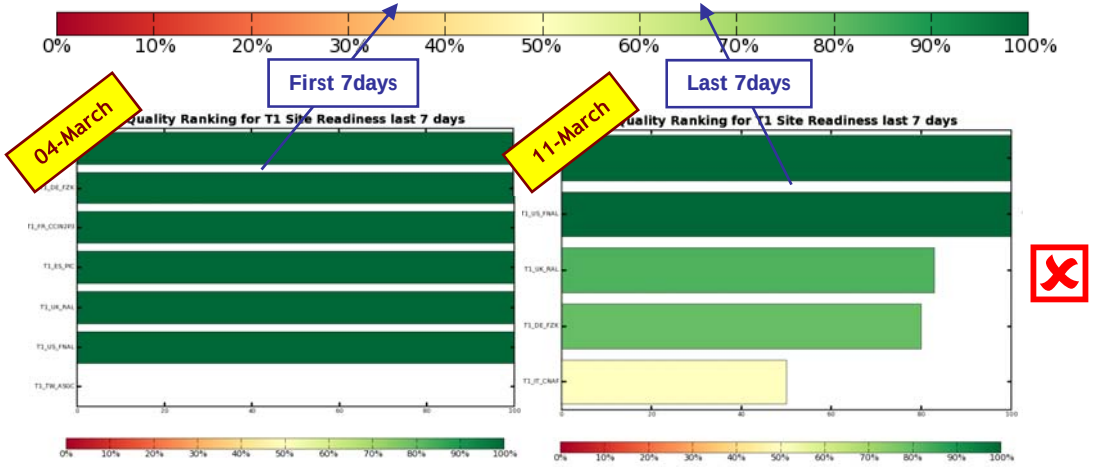
Site Readiness Results for T1s (Update) I



Site Readiness Results for T1s (Update) II

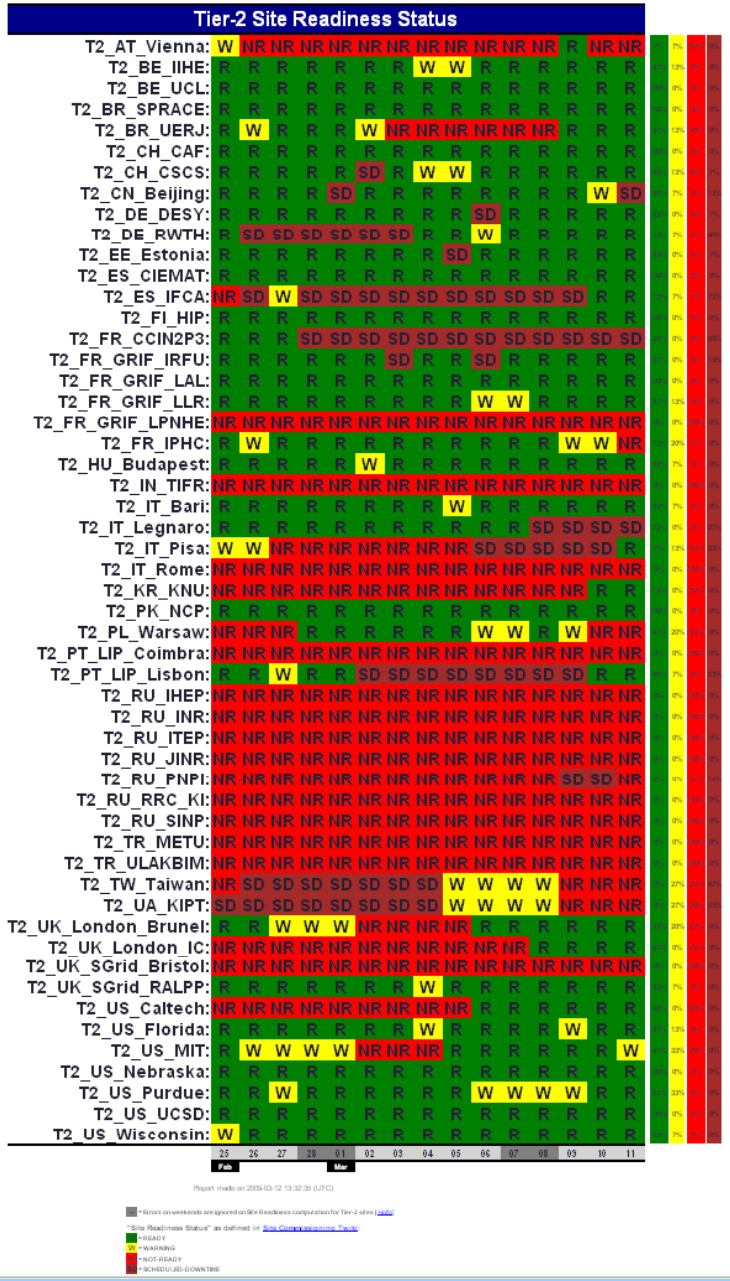




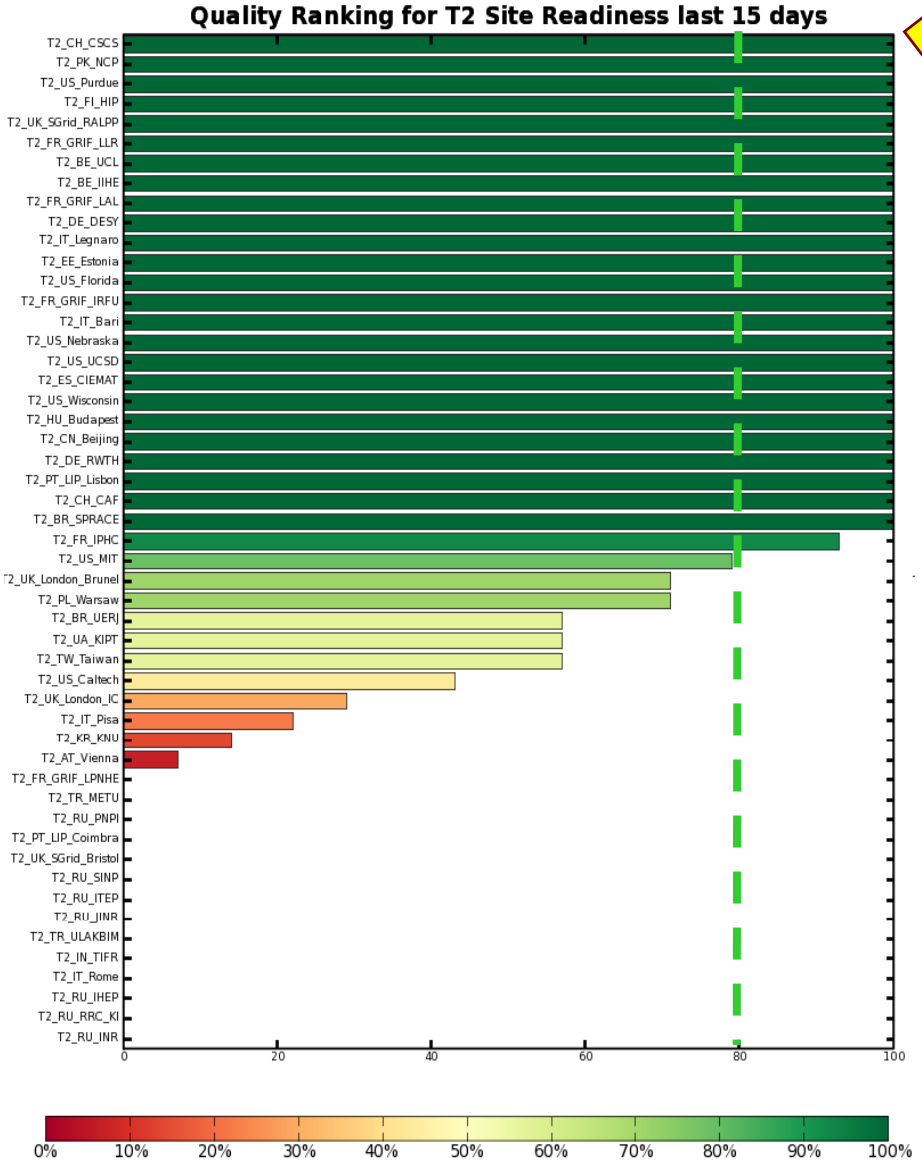


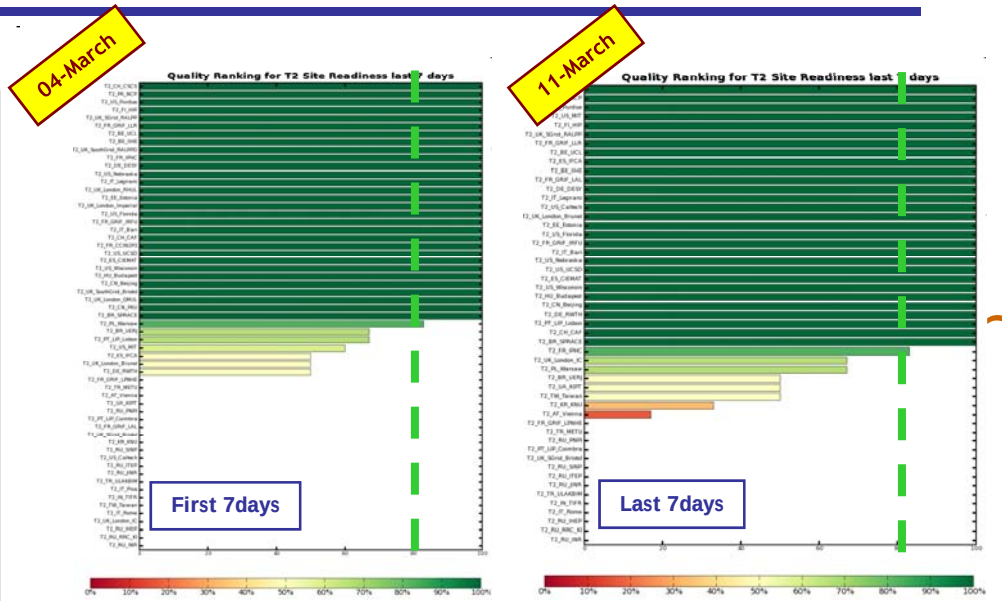
- ASGC in **SD** due to fire incident.
- IN2P3 CE-SD declared
- Last 2 days, some degradation on T1s
- Note: new SD tracker included ‘last’ 7 days.

Site Readiness Results for T2s (Update) I



Site Readiness Results for T2 sites II





- Note: new SD tracker included ‘last’ 7 days.

Site Readiness alerts to sites

- **We plan to enable automatic Savannah creation on esporadic problems ocurring on "good" sites, so they can manage themselves:**

  - This means 2 tickets per day. For example, last 3 days:

2009-03-06:

T2_DE_RWTH SAMAvailability 52%
T2_FR_GRIF_IRFU SAMAvailability 72%
T2_US_Purdue JobRobot 79%

2009-03-07:

T2_FR_GRIF_LLR SAMAvailability 56%
T2_US_Purdue JobRobot 74%

2009-03-08:

T2 US Purdue JobRobot 63%
T2_US_Purdue SAMAvailability 12%

  - The # of opened tickets by Site Readiness will also be monitored in the SSB (re-using Pablo's script).

  - Distribute a script for sites, so they can use it to know their status, Site Readiness % last 15/30 days, Daily Metrics, etc… and plug it into their local monitoring as they wish (M. Thomas interested on link to Nagios)