



Enabling Grids for E-scienceE

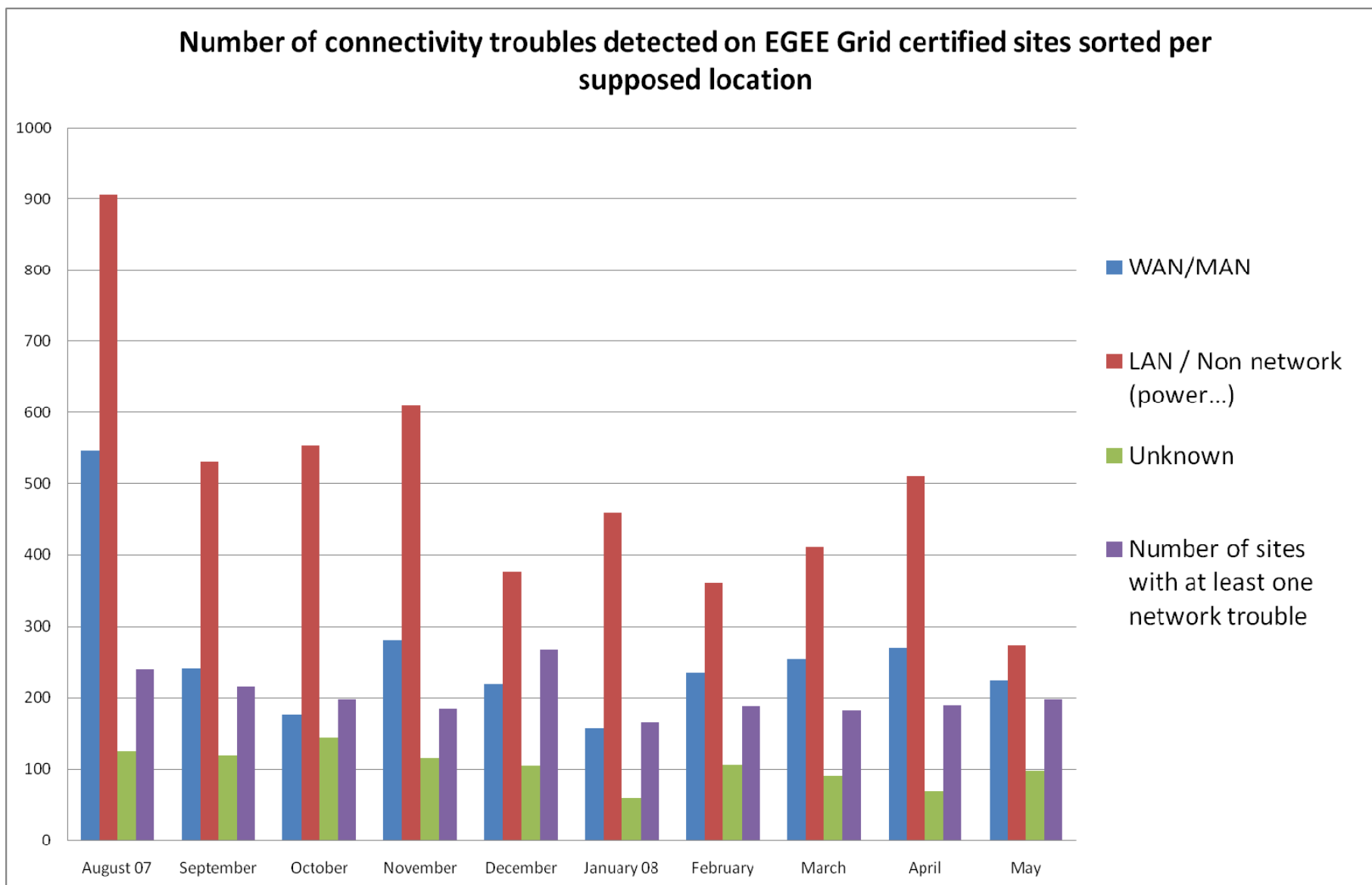
eNOC 's tools targeted to be useful for COD activity

Current status and future plan

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- **Goals**

- Network problem: What,where,when?
 - Was problem noticed
 - Is someone following it
 - Can I have extra information about (scheduled end date, impact...)

- Now **2 flagship tools** aiming to be also useful for Grid Operations

1. **DownCollector**
2. **Network tickets dashboard**

- **Work focus of SA2 for EGEE-III is around these tools!**

- Strongly based on fruitful feedbacks we got

1 – DownCollector (1/4)

- <https://ccenoc.in2p3.fr/DownCollector/>

Select Grid site Select Grid node


[\[Troubles\]](#) [\[Central Troubles\]](#) [\[Explanations\]](#) [\[BDIIs not OK\]](#) [\[Sites with all nodes unreachable\]](#) [\[Monitored nodes not reached\]](#)
[\[Central GRID services\]](#) [\[GOCDB3\]](#) [\[Nodes/Sites in scheduled downtime into GOCDB3\]](#) [\[Networks headnodes\]](#) [\[TCP ports tested\]](#)

Latest 20 connectivity troubles affecting **Certified Grid sites** raised by DownCollector:

Trouble ID	Site	Current status	Date started UTC	Date ended UTC	Date updated UTC	Downtime	Location
ENOC-TD-44762	INFN-ROMA2	UNREACHED	2008-06-03 23:32:19		2008-06-04 07:24:17	7 hours 51 minutes 58 seconds	ON-SITE
ENOC-TD-38252	UKI-LT2-IC-HEP-PPS	UNREACHED	2008-04-14 15:06:17		2008-06-04 07:24:34	50 days 16 hours 18 minutes 17 seconds	ON-SITE
ENOC-TD-44798	HG-03-AUTH	REACHED	2008-06-04 06:24:35	2008-06-04 06:28:48	2008-06-04 06:28:48	4 minutes 13 seconds	ON-SITE
ENOC-TD-44788	UB-LCG2	REACHED	2008-06-04 05:24:22	2008-06-04 05:36:50	2008-06-04 05:36:50	12 minutes 28 seconds	ON-SITE
ENOC-TD-44778	IL-IUCC	REACHED	2008-06-04 01:15:07	2008-06-04 02:30:51	2008-06-04 02:30:51	1 hour 15 minutes 44 seconds	ON-SITE
ENOC-TD-44777	IL-BGU-PPS	REACHED	2008-06-04 01:14:54	2008-06-04 02:30:51	2008-06-04 02:30:51	1 hour 15 minutes 57 seconds	OFF-SITE
ENOC-TD-44776	WEIZMANN-LCG2	REACHED	2008-06-04 01:14:41	2008-06-04 02:30:51	2008-06-04 02:30:51	1 hour 16 minutes 10 seconds	OFF-SITE
ENOC-TD-44775	IL-BGU	REACHED	2008-06-04 01:14:28	2008-06-04 02:30:51	2008-06-04 02:30:51	1 hour 16 minutes 23 seconds	ON-SITE
ENOC-TD-44772	IL-BGU	REACHED	2008-06-04 01:02:57	2008-06-04 01:06:50	2008-06-04 01:06:50	3 minutes 53 seconds	OFF-SITE
ENOC-TD-44771	IL-IUCC	REACHED	2008-06-04 01:02:45	2008-06-04 01:06:50	2008-06-04 01:06:50	4 minutes 5 seconds	OFF-SITE
ENOC-TD-44770	IL-BGU-PPS	REACHED	2008-06-04 01:02:30	2008-06-04 01:06:50	2008-06-04 01:06:50	4 minutes 20 seconds	OFF-SITE
ENOC-TD-44769	WEIZMANN-LCG2	REACHED	2008-06-04 01:02:18	2008-06-04 01:06:50	2008-06-04 01:06:50	4 minutes 32 seconds	OFF-SITE
ENOC-TD-44747	ESA-ESRIN	REACHED	2008-06-03 19:04:17	2008-06-03 20:26:48	2008-06-03 20:26:48	1 hour 22 minutes 31 seconds	ON-SITE
ENOC-TD-44743	ESA-ESRIN	REACHED	2008-06-03 18:12:18	2008-06-03 19:02:47	2008-06-03 19:02:47	50 minutes 29 seconds	ON-SITE
ENOC-TD-44729	wuppertalprod	REACHED	2008-06-03 13:40:20	2008-06-03 13:46:48	2008-06-03 13:46:48	6 minutes 28 seconds	OFF-SITE
ENOC-TD-44724	UB-LCG2	REACHED	2008-06-03 12:46:28	2008-06-03 12:56:52	2008-06-03 12:56:52	10 minutes 24 seconds	ON-SITE
ENOC-TD-44718	INFN-TRIESTE	REACHED	2008-06-03 11:04:34	2008-06-03 11:24:49	2008-06-03 11:24:49	20 minutes 15 seconds	OFF-SITE
ENOC-TD-44716	TW-NTCU-HPC-01	REACHED	2008-06-03 10:56:42	2008-06-03 11:00:56	2008-06-03 11:00:56	4 minutes 14 seconds	ON-SITE
ENOC-TD-44715	VICTORIA-LCG2	REACHED	2008-06-03 10:56:37	2008-06-03 11:00:56	2008-06-03 11:00:56	4 minutes 19 seconds	ON-SITE
ENOC-TD-44714	TW-NCUHEP	REACHED	2008-06-03 10:56:33	2008-06-03 11:00:56	2008-06-03 11:00:56	4 minutes 23 seconds	ON-SITE

View troubles for [**Certified** - **Uncertified** - **Candidate**] sites

- History of troubles per site [\[https://ccenoc.in2p3.fr/DownCollector/?st=IL-IUCC\]](https://ccenoc.in2p3.fr/DownCollector/?st=IL-IUCC)

 View latest nodes results

Trouble ID	Current status	Date started UTC	Date ended UTC	Date updated UTC	Downtime	Location
ENOC-TD-44778	REACHED	2008-06-04 01:15:07	2008-06-04 02:30:51	2008-06-04 02:30:51	1 hour 15 minutes 44 seconds	ON-SITE
ENOC-TD-44771	REACHED	2008-06-04 01:02:45	2008-06-04 01:06:50	2008-06-04 01:06:50	4 minutes 5 seconds	OFF-SITE
ENOC-TD-42935	REACHED	2008-05-18 22:15:15	2008-05-19 00:36:23	2008-05-19 00:36:23	2 hours 21 minutes 8 seconds	OFF-SITE
ENOC-TD-37257	REACHED	2008-04-08 04:22:55	2008-04-08 04:26:54	2008-04-08 04:26:54	3 minutes 59 seconds	ON-SITE
ENOC-TD-37133	REACHED	2008-04-07 04:41:25	2008-04-07 04:42:59	2008-04-07 04:42:59	1 minute 34 seconds	ON-SITE
ENOC-TD-33584	REACHED	2008-03-11 03:21:21	2008-03-11 03:30:39	2008-03-11 03:30:39	9 minutes 18 seconds	OFF-SITE

- Current node results [\[https://ccenoc.in2p3.fr/DownCollector/?sn=HK-HKU-CC-01\]](https://ccenoc.in2p3.fr/DownCollector/?sn=HK-HKU-CC-01)

Node type	IP	Hostname	Port	Status	Date UTC
CE	147.8.152.25	ce.grid.hku.hk	2119	OK	2008-06-10 07:20:03
MON	147.8.152.23	mon.grid.hku.hk	8443	OK	2008-06-10 07:20:08
SE	147.8.152.24	dpm.grid.hku.hk	2811	OK	2008-06-10 07:20:10

- History per node [\[https://ccenoc.in2p3.fr/DownCollector/?nd=Site-BDII,ce.cp.di.uminho.pt\]](https://ccenoc.in2p3.fr/DownCollector/?nd=Site-BDII,ce.cp.di.uminho.pt)

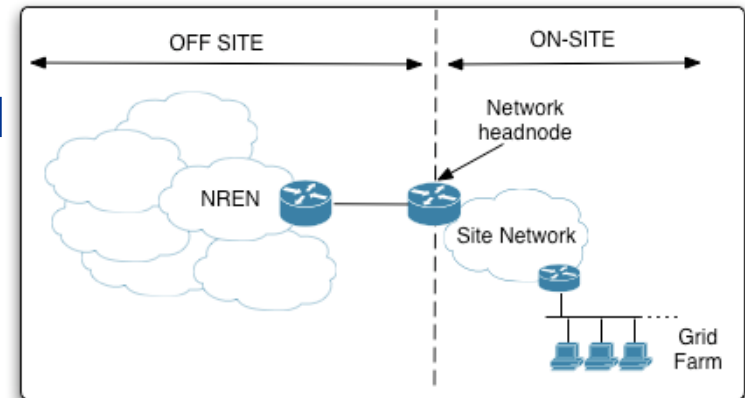
Node type	IP	Hostname	Port	Status	Date UTC
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	TIMEOUT	2008-06-10 07:22:13
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	OK	2008-06-10 07:20:12
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	OK	2008-06-10 07:18:11
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	TIMEOUT	2008-06-10 07:16:11
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	OK	2008-06-10 07:14:10
Site-BDII	193.136.19.183	ce.cp.di.uminho.pt	2170	TIMEOUT	2008-06-10 07:12:13

- **Troubles handling**

- Categorization by location: OFF-SITE vs ON-SITE
 - Detected using a network checkpoint (headnode) on site

- **OFF-SITE troubles = on transit networks = ENOC's responsibility**

- Goal: Keep Grid operations informed

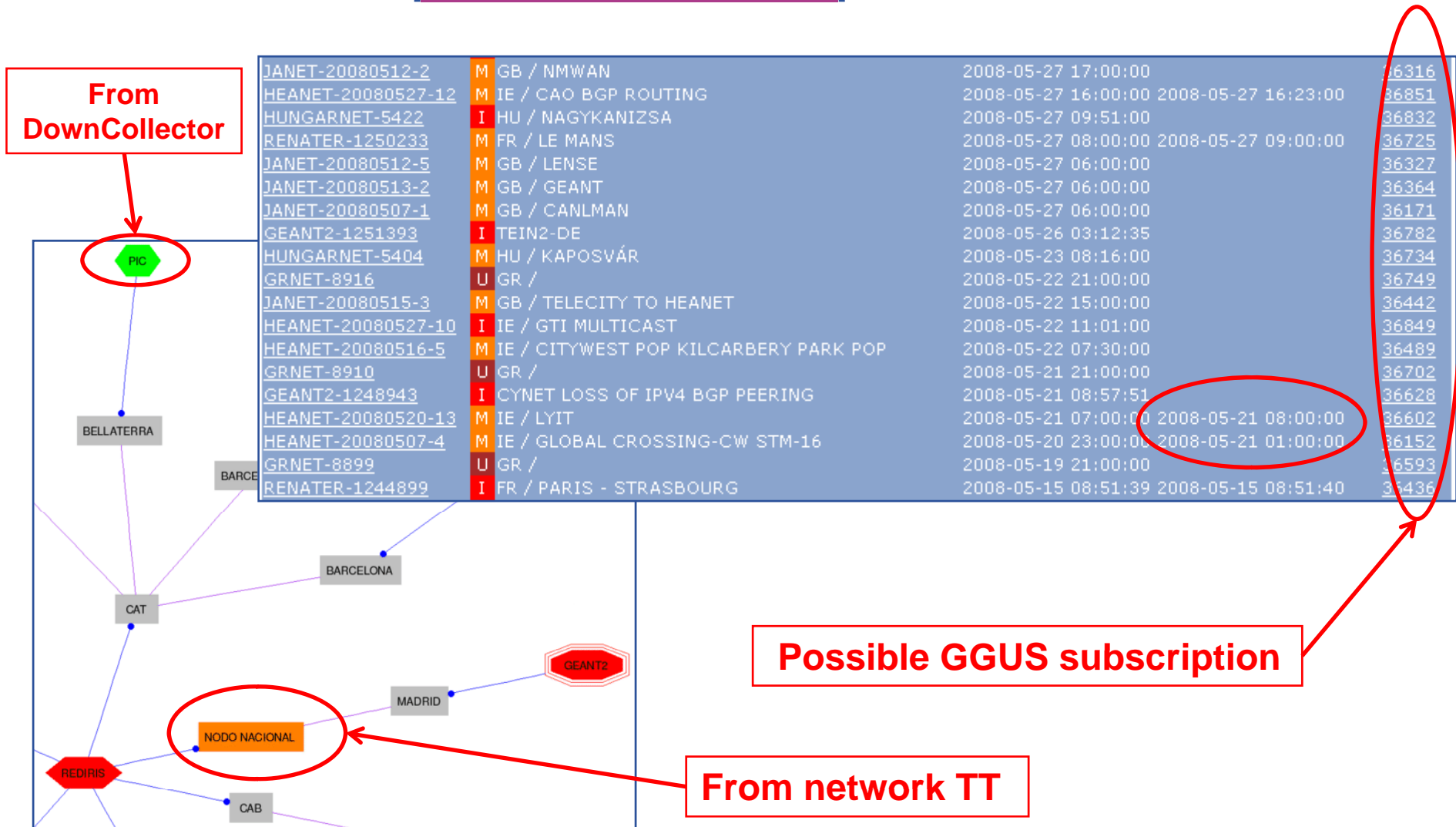


- **ON-SITE troubles**

- No yet processes for them...
- ... but not under ENOC's responsibility?
- First sign of Grid troubles?
 - *Possibly non network related troubles (power, service down, ...)*
- > 300 troubles/months → Threshold needed

- **Seems quite useful and reliable**
 - Now a 10 months running background
 - No « core » improvement planned
 - Now focus on delivering useful information
- **Should be better integrated into COD dashboard**
 1. Currently discrepancies between tests' datetime
 2. Root of an alarms hierarchy and masking?
 - Maybe in SAM pre-test? In COD dashboard?
 - “Avoid new alarms, but take care of network state for existing”
- **Monitoring of Gridops services**
 - Where are we with that?
 - DownCollector extension?

- Current status [<https://ccenoc.in2p3.fr/TTdrawlight/>]



- **Network tickets = Sole information from network providers**
 - Their processing is really a compulsory step
- **Current automatic solution not enough powerful**
 - Very mitigated results but was a first experimental attempt!
 - “Raw” experimental matching, too many irrelevant tickets provided on a FYI basis: “Too much is better than not enough”...
 - New objectives:
 - *Reduce number of tickets & report only relevant*
- **Ongoing for EGEE-III**
 - Improve information we gather from networks providers
 - Matching system to be heavily improved
 - **Link troubles raised by DownCollector with related network tickets!**

- **Some ENOC's tools should help Grid Operations**
 - And they will be improved during EGEE-III
 - We started from scratch in EGEE-II...

- **LHC OPN support scheme currently being designed**
 - Some useful tools or interface should appear
 - Complex interactions with the Grid should be tackled

- **Possible "SA2" integration within EGI model**
 - Being studied...

- **Any feedback, ideas etc. are always welcome**
 - Is the information delivered usefull for you?
 - What do you need? What can be improved?

