



Ιωάννης Παπαδόπουλος

Επίκουρος Καθηγητής

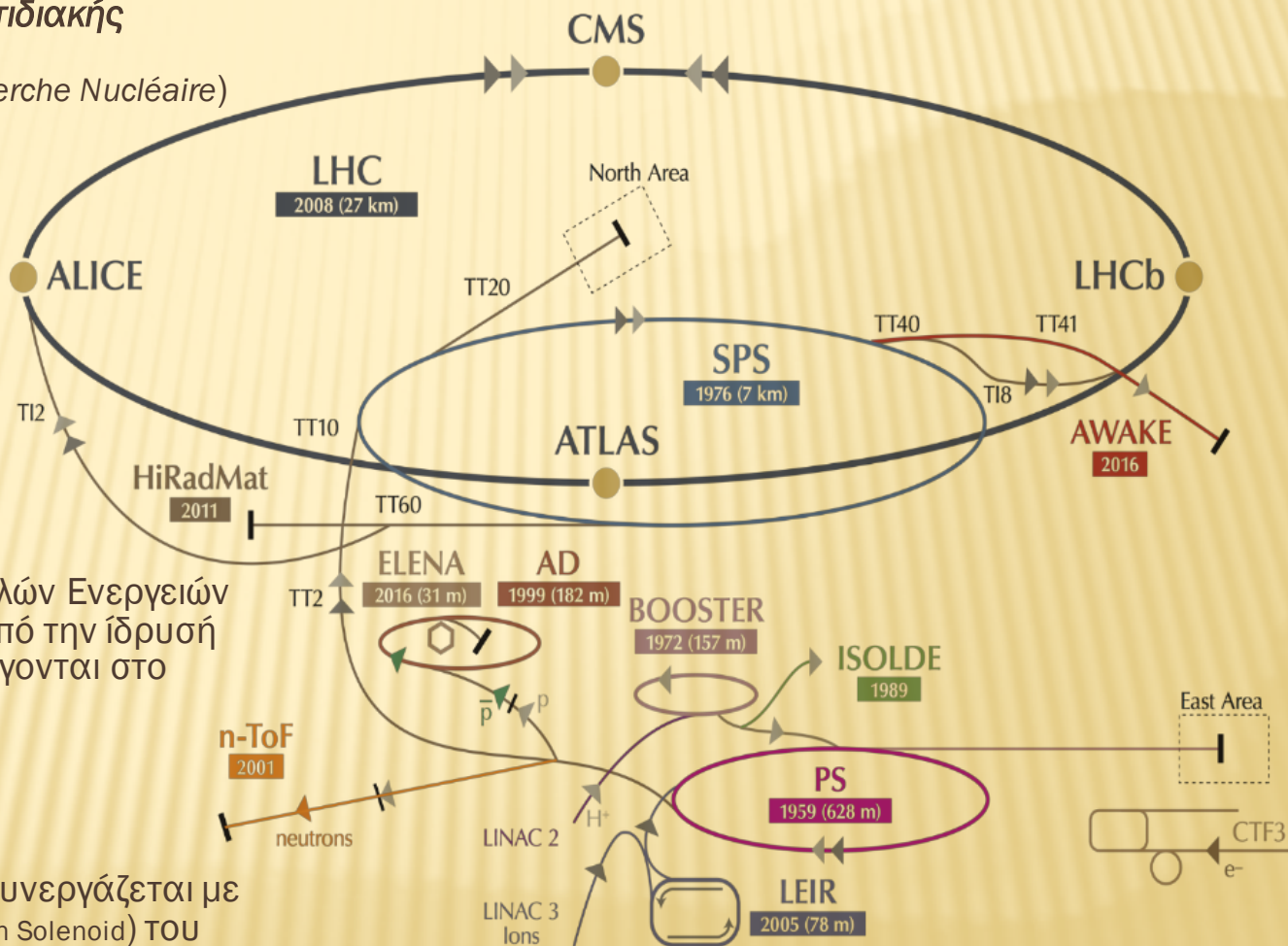
Τμήμα Φυσικής

Πανεπιστήμιο Ιωαννίνων

Ο κόμβος GRID WLCG Tier-2 του Εργαστηρίου Φυσικής Υψηλών Ενεργειών του Πανεπιστημίου Ιωαννίνων

CERN & ΕΦΥΕ

- ✗ Το Ευρωπαϊκό Κέντρο Σωματιδιακής Φυσικής CERN (*Conseil Européen pour la Recherche Nucléaire*) ιδρύθηκε το 1954.



- ✗ Το Εργαστήριο Φυσικής Υψηλών Ενεργειών (ΕΦΥΕ) του ΠΙ συμμετέχει, από την ίδρυσή του, σε πειράματα που διεξάγονται στο CERN.
- ✗ Από τη δεκαετία του 1990 συνεργάζεται με το πείραμα **CMS** (Compact Muon Solenoid) ΤΟΥ CERN, ήδη από την περίοδο σχεδιασμού του.

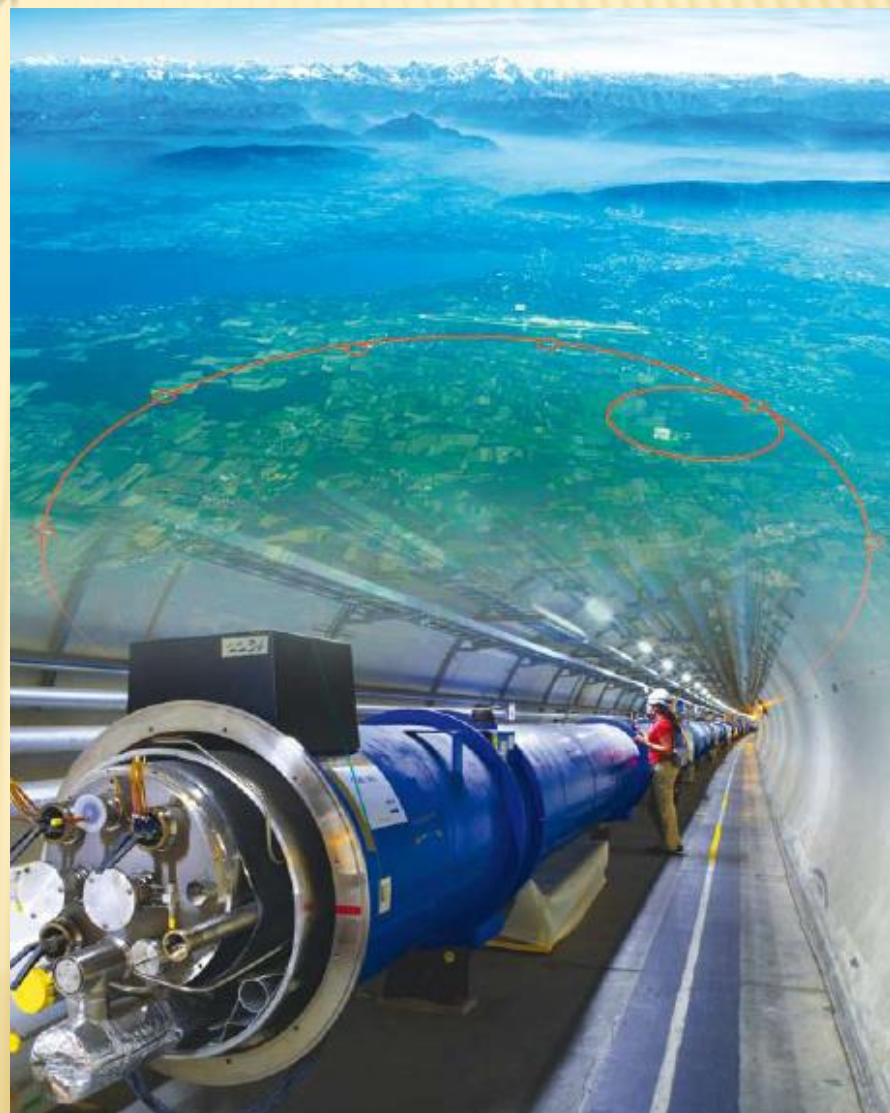


Ο επιταχυντής LHC στο CERN

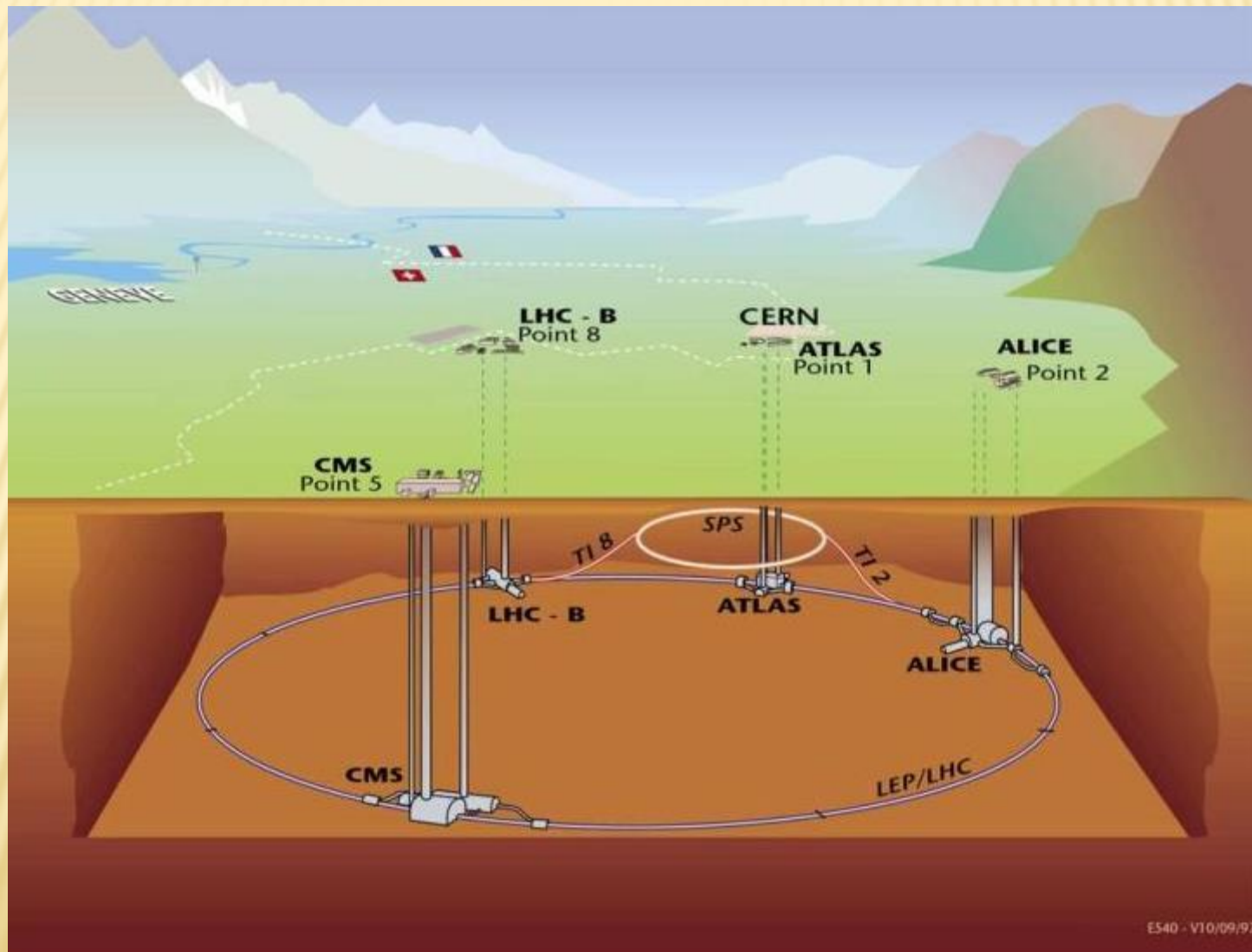
- ✗ LHC : Large Hadron Collider
- ✗ Κατασκευάστηκε εντός του τούνελ του προϋπάρχοντος επιταχυντή LEP
- ✗ Οδηγεί σε σύγκρουση **πρωτόνια** με ενέργεια στο κέντρο μάζας που φθάνει τα **14 TeV**

- ✗ 1983: Πρώτες μελέτες του LHC project
- ✗ 1988: Πρώτο σχέδιο μαγνήτη του LHC
- ✗ 1994: Έγκριση κατασκευής του LHC
- ✗ 1996-2009: Κατασκευή, εγκατάσταση, δοκιμαστική λειτουργία
- ✗ 2010-2035: Χρήση για πειράματα Φυσικής

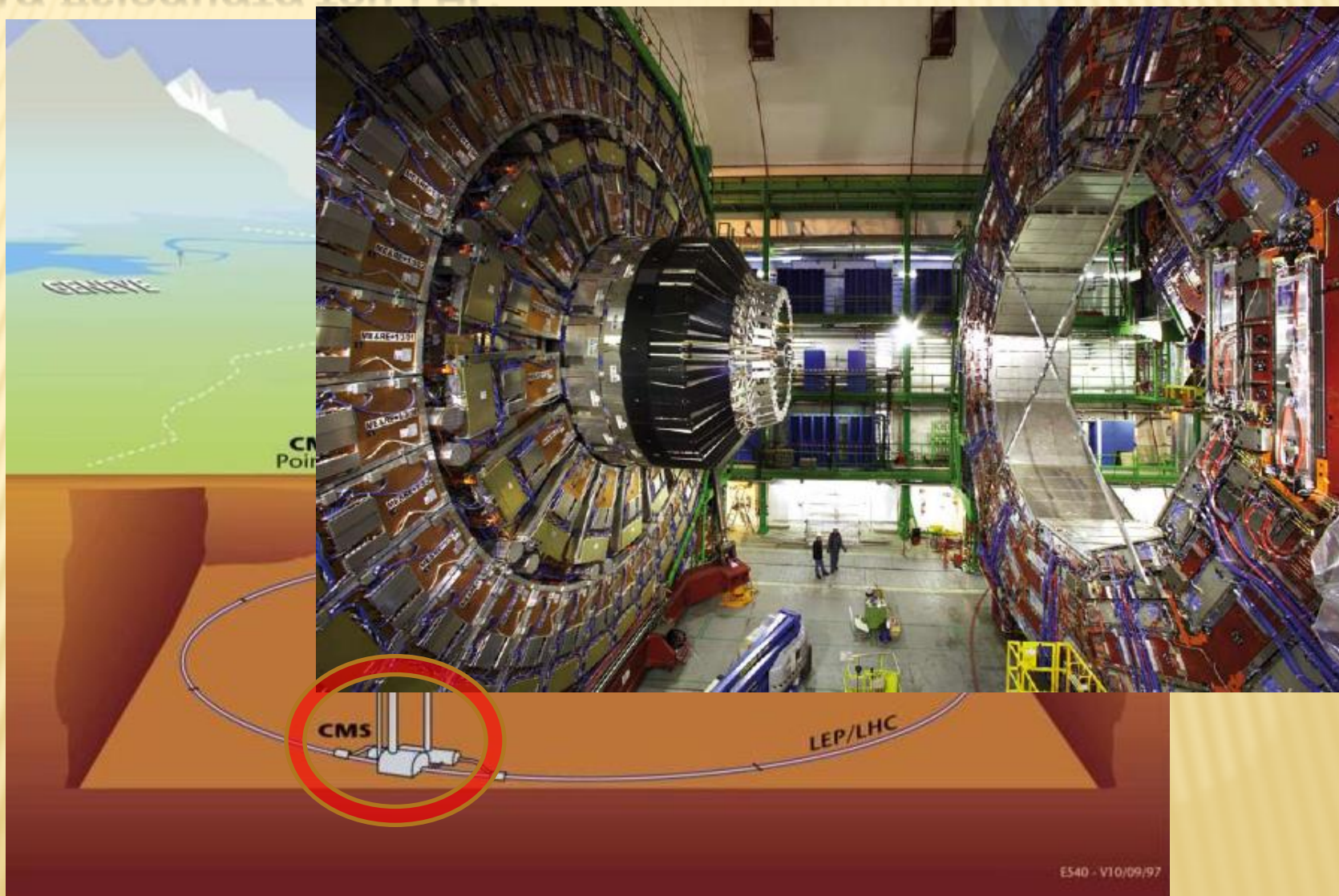
- + 2010 – 2012 : Run1 @ 7 και 8 TeV
- + 2015 – 2018 : Run2 @ 13 TeV
- + 2021 – 2023 : Run3 @14 TeV
- + 2024 – 2025 : εγκατάσταση του HL-LHC
- + 2026 – 2035... : Run4 (HL-LHC) @ 14 TeV



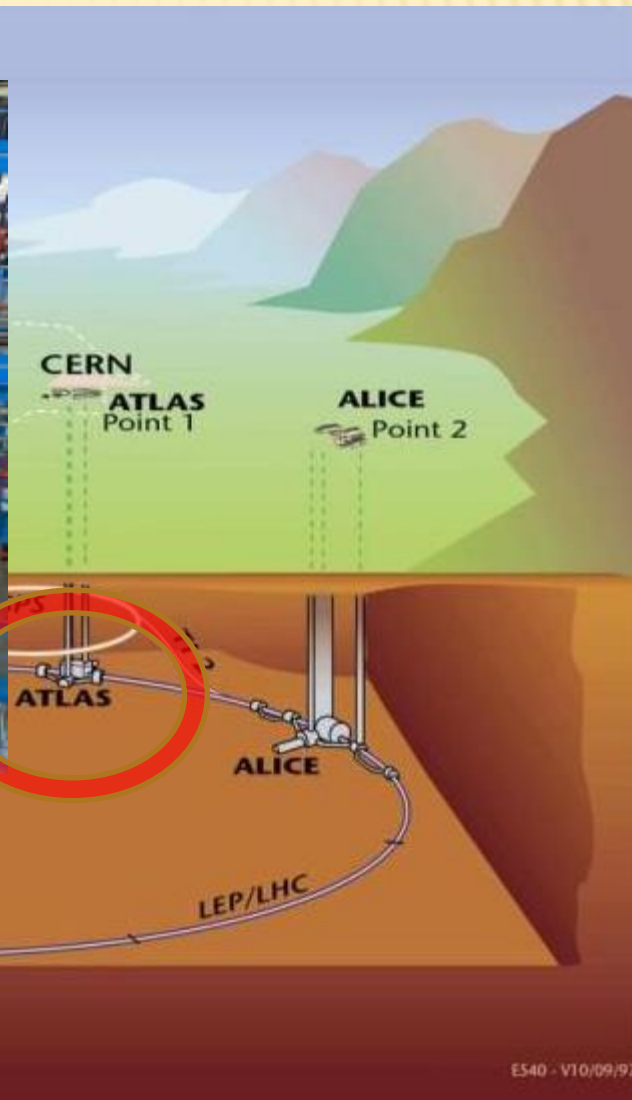
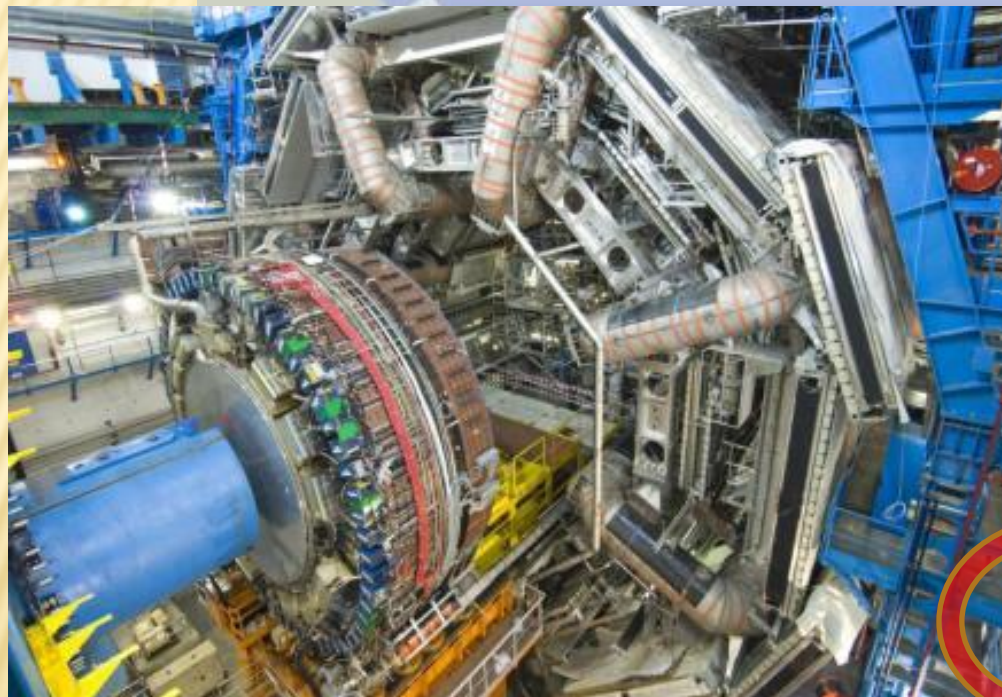
Τα πειράματα του LHC



Τα πειράματα του LHC

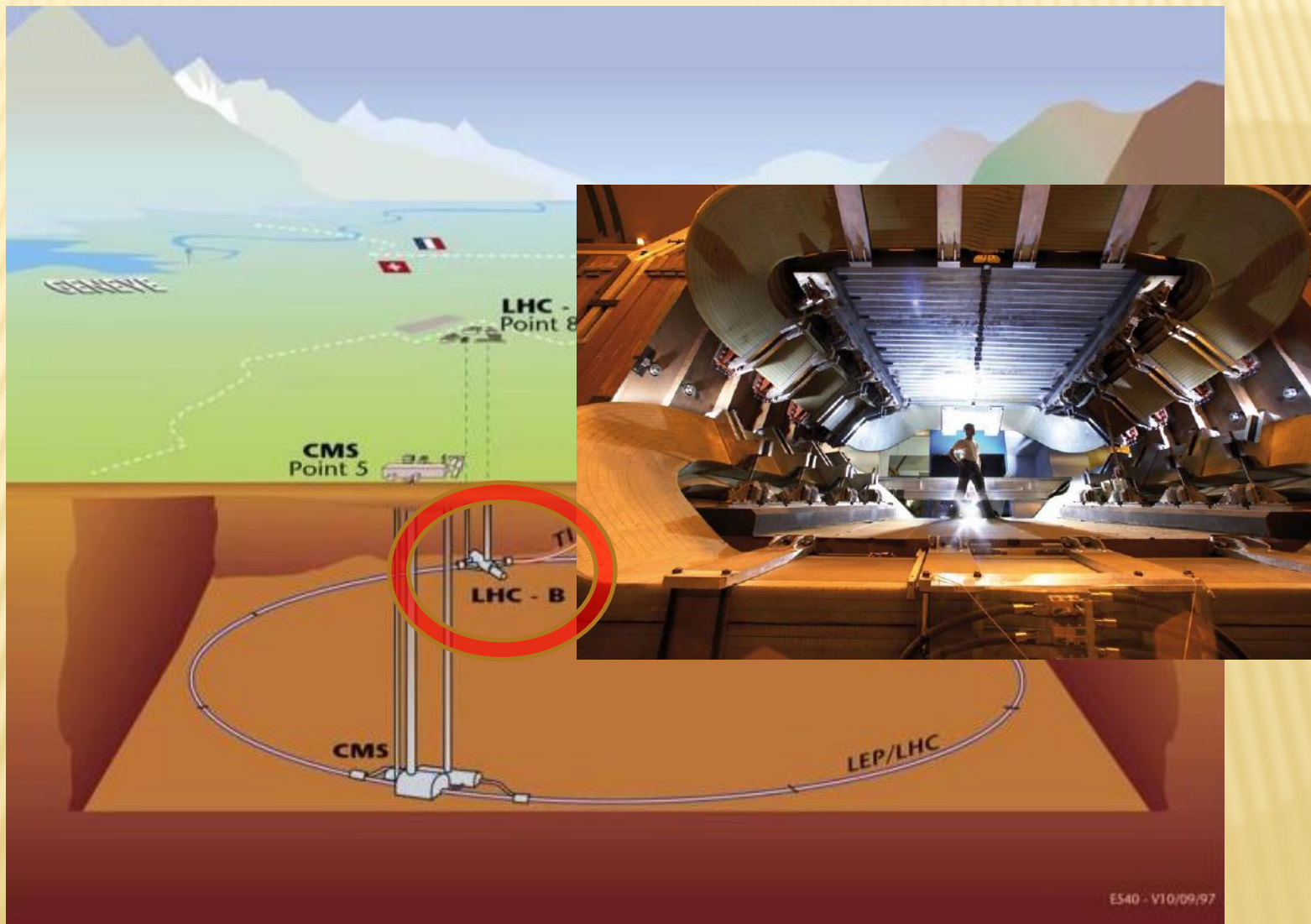


Τα πειράματα του LHC

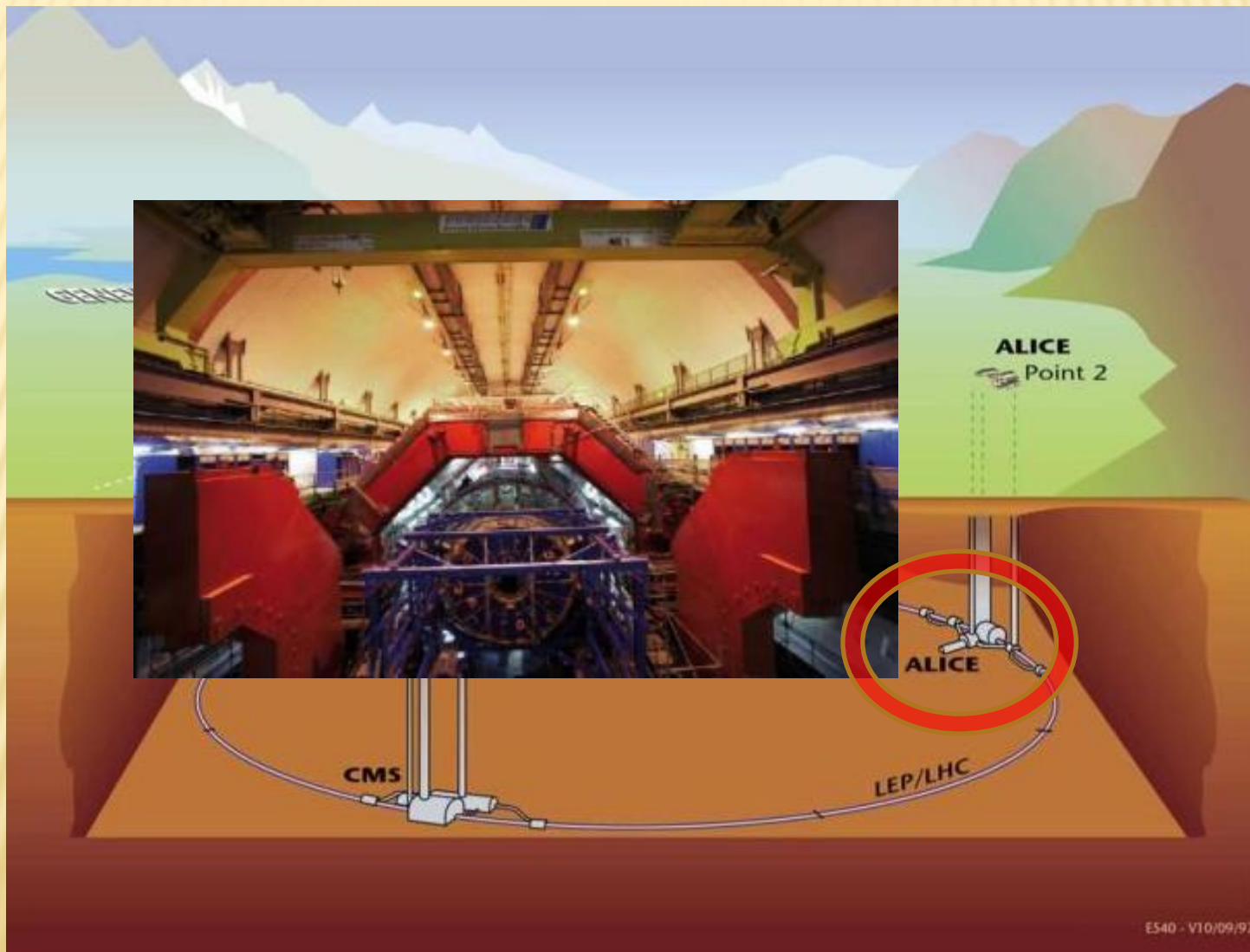


ES40 - V10/09/97

Τα πειράματα του LHC

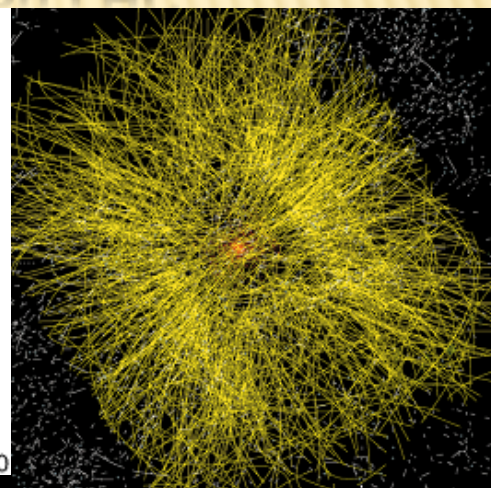
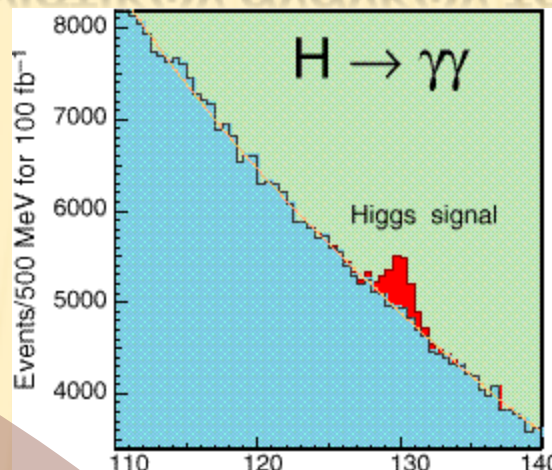


Τα πειράματα του LHC

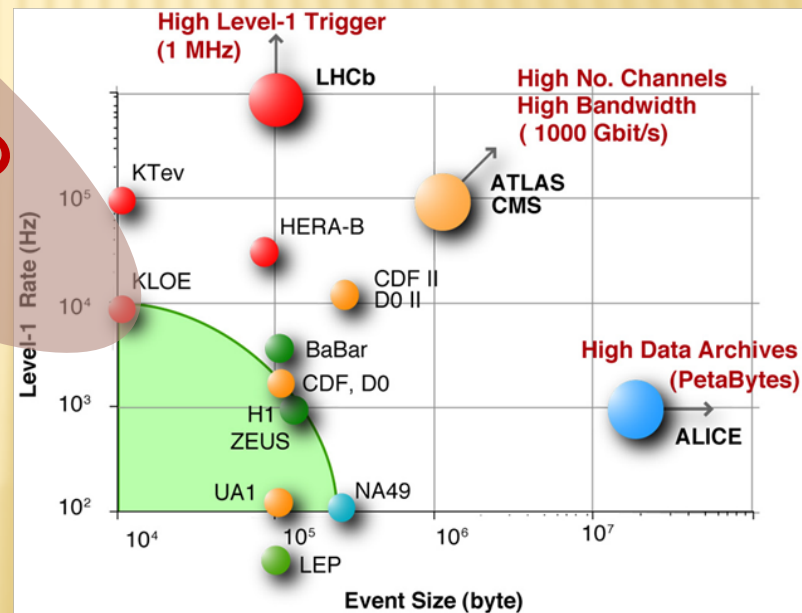


ES40 - V10/09/97

Η πρόκληση των υπολογιστικών αναγκών του LHC



2010-2012
RUN1



✗ $40 \cdot 10^6$ συγκρούσεις/sec

✗ Όγκος δεδομένων

- + υψηλός ρυθμός (~1kHz)
- * μεγάλος αριθμός καναλιών
- * 4 πειράματα
- + 15 PetaByte / έτος

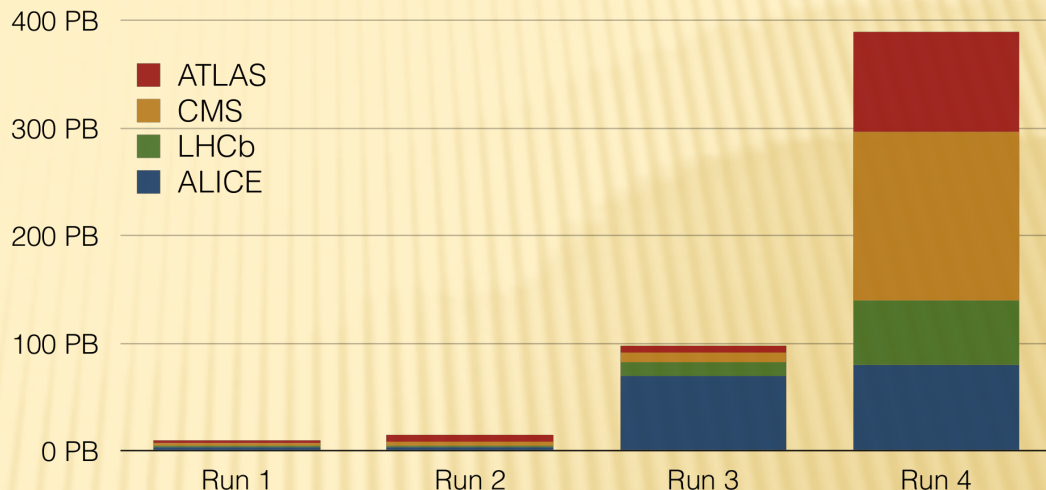
✗ Υπολογιστική ισχύς

- + πολυπλοκότητα γεγονότων
- * αριθμός γεγονότων
- * χιλιάδες χρήστες
- + 200 k CPUs
- + 45 PB όγκος αποθήκευσης

✗ Ανάλυση δεδομένων σε παγκόσμια κλίμακα

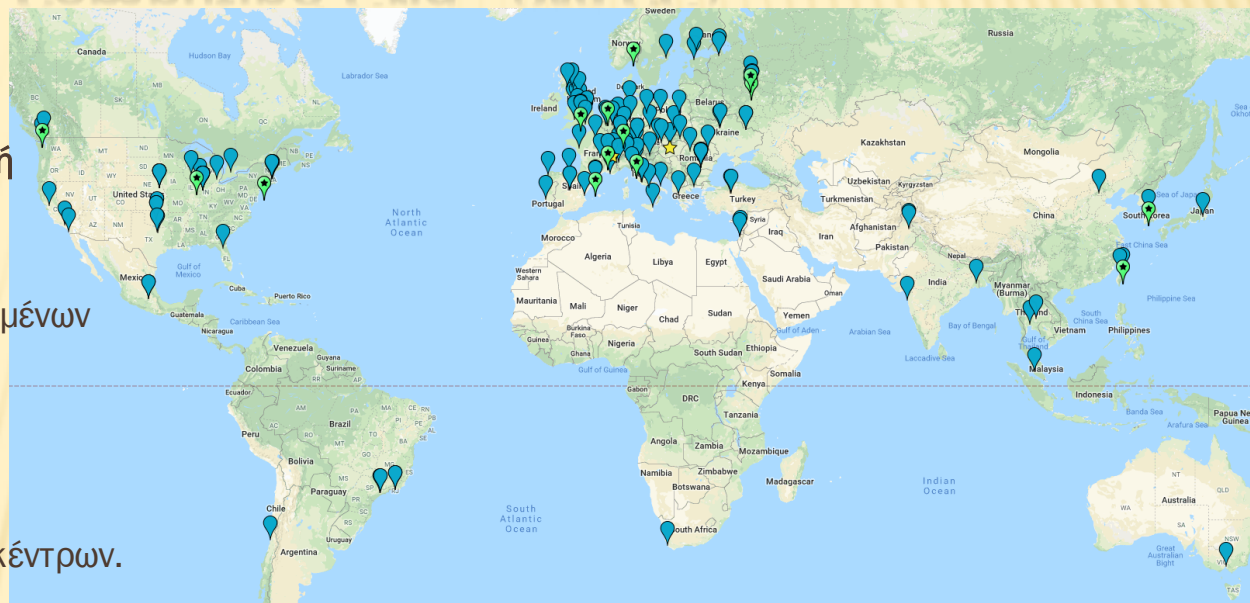
- + Καταμερισμός της ανάλυσης και της χρηματοδότησής της σε ευρύτερες περιοχές/χώρες
- + Αποδοτικότερη ανάλυση παντού
- + Χρήση τεχνολογιών GRID

Η πρόκληση των υπολογιστικών αναγκών του LHC



- ✗ Όγκος δεδομένων του Run2
 - + ~80 PB / έτος
- ✗ Υπολογιστική ισχύς
 - + πολλαπλάσια ως προς το Run1
- ✗ Στο μέλλον:
 - ✗ HL-LHC (10πλάσια λαμπρότητα)
 - ✗ Run3 : ~150 PB/έτος
 - ✗ Run4 : ~600 PB/έτος
 - ✗ Εκθετικά αυξανόμενες ανάγκες σε υπολογιστική ισχύ
- ✗ Ανάλυση δεδομένων σε παγκόσμια κλίμακα
 - + GRID
 - + CLOUD

Worldwide LHC Computing Grid (WLCG)



- ✗ Πρόκειται για μία κατανεμημένη υπολογιστική υποδομή
- ✗ Παρέχει ένα κοινό περιβάλλον για την παραγωγή και ανάλυση δεδομένων όλων των πειραμάτων του LHC.
- ✗ Διευθύνεται και λειτουργεί από μία παγκόσμια συνεργασία μεταξύ των πειραμάτων και των υπολογιστικών κέντρων.
- ✗ Οι πόροι κατανέμονται σε περιοχές/χώρες, για οικονομικούς και κοινωνικούς λόγους.
- ✗ Στόχος είναι η εκμετάλλευση όλων των διαθέσιμων πόρων, όπου και αν αυτοί βρίσκονται.
- ✗ Τα επιμέρους υπολογιστικά κέντρα (sites) μεγάλα και μικρά, συνεισφέρουν στο τελικό αποτέλεσμα.

Tier-0 (CERN & Βουδαπέστη):

- Καταγραφή δεδομένων
- Πρώτη ανακατασκευή γεγονότων
- Διανομή δεδομένων

Tier-1 (14 κέντρα):

- Μόνιμη αποθήκευση
- Ανακατασκευή γεγονότων
- Ανάλυση

Tier-2 (151 κέντρα):

- Προσομοίωση
- Ανάλυση σε επίπεδο χρήστη

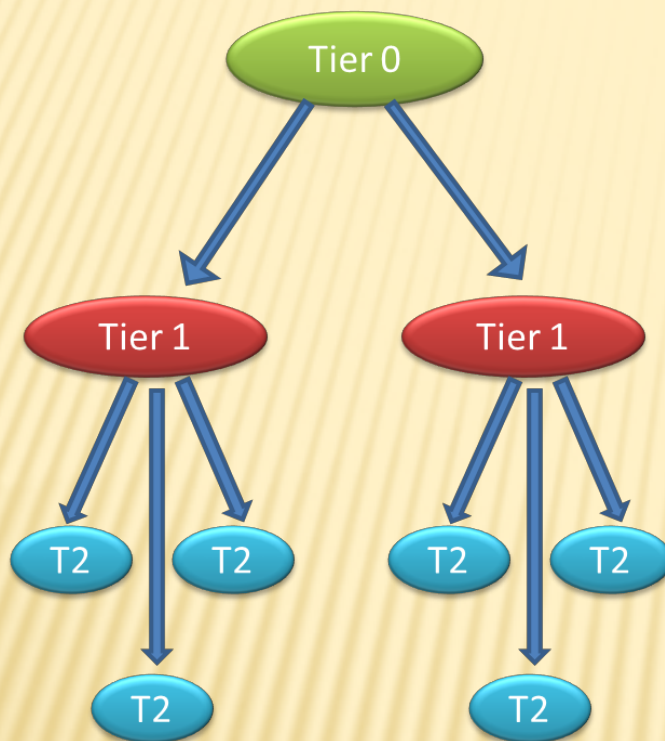
Tier-3 :

- Νησίδες Η/Υ/εργαστηρίων

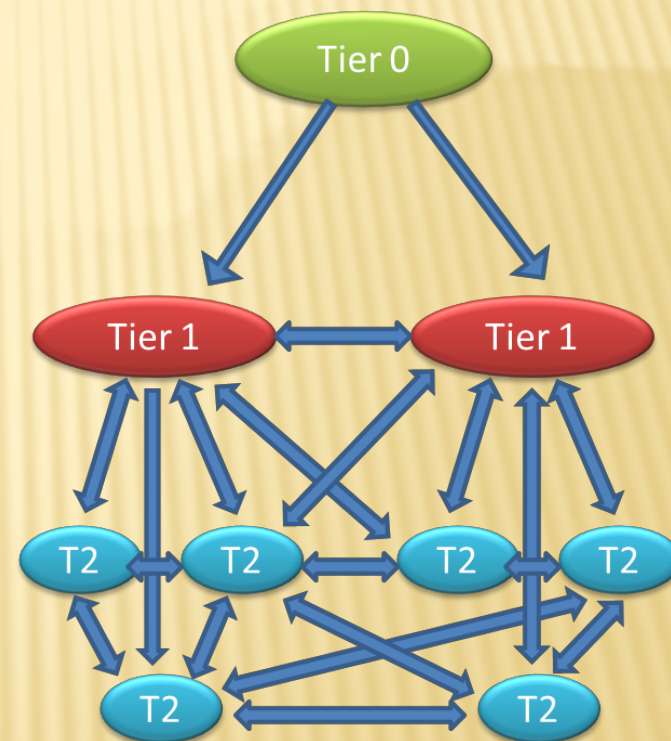
Tier-4:

- Προσωπικοί Η/Υ

Υπολογιστικό μοντέλο του WLCG



Ιεραρχική δομή



δομή πλέγματος



EGI/GRNET/GR-07-UOI-HEPLAB : T2_GR_Ioannina

- ✗ 2007
 - + Έναρξη του κόμβου GRID **GR-07-UOI-HEPLAB**
Ο κόμβος υποστηρίζει το **CMS VO**
 - + Μέγεθος: **10 CPUs** / Χώρος αποθήκευσης **~5 TB**
- ✗ 2008 - 2009
 - + Πιστοποίηση του κόμβου → **production status**
 - + Αναβάθμιση σε κόμβο Tier-3 του CMS με όνομα **T3_GR_Ioannina**
 - + Μεσισμικό: gLite3.1/SLC4 & gLite3.2/SLC5
 - + Μέγεθος: **28 CPUs** / Χώρος αποθήκευσης **~40 TB**
- ✗ 2010
 - + Χρηματοδότηση από το ΠΙ (~50κ€) → αναβάθμιση του κόμβου
 - ✗ επιπλέον CPUs και αποθηκευτικός χώρος
 - + εγκατάσταση/ρύθμιση/έλεγχος του SLC5 CMSSW (32- and 64-bit)
 - + Μεσισμικό : gLite 3.2 / SLC5
 - + Μέγεθος : **116 CPUs** / Χώρος αποθήκευσης **~200 TB**
- ✗ 2011
 - + Κατασκευή αποκλειστικού κλιματιζόμενου χώρου (η ισχύς ψύξης διπλασιάστηκε το 2012)
 - + **Αναβάθμιση σε κόμβο WLCG Tier-2 :**
Υπογραφή συμφωνητικού (MoU) μεταξύ **WLCG/CERN** και Πανεπιστημίου Ιωαννίνων (Απρίλιος 2011):

Tier	Country	Federation Name	Accounting Name
Tier 2	Greece	HEP Laboratory, University of Ioannina	GR-Ioannina-HEP

 WLCG REBUS → <http://gstat-wlcg.cern.ch/apps/topology/federation/281/>
 - + Αναβάθμιση / μετονομασία του κόμβου σε **T2_GR_Ioannina** (Νοέμβριος 2011)
 - + Μέγεθος: **156 CPUs** / Αποθηκευτικός χώρος **~210 TB**
 - + Αποκλειστική χρήση από τον **CMS VO**,
με προτεραιότητα στους τοπικούς χρήστες





T2_GR_Ioannina

- ✖ Αναβάθμιση από Tier-3 σε Tier-2
 - + Ως προς τη λειτουργία δεν υπάρχει κάποια διαφορά.
 - + Όλες οι υπηρεσίες του GRID και του CMS VO είναι ίδιες για κόμβους Tier-3 σε Tier-2.
 - + Όμως οι κόμβοι Tier-3
 - ✖ ... δεν έχουν υποχρέωση εξασφάλισης της αδιάλειπτης καλής λειτουργίας του κόμβου.
 - ✖ ... δεν υποχρεούνται στην τήρηση αυστηρών προδιαγραφών.
 - ✖ ... δεν θεωρείται ότι επιτελούν *CMS service work*!
 - + Αντίθετα, για τους κόμβους Tier-2
 - ✖ ... πρέπει να εγγυώνται τη συνεχή καλή λειτουργία τους.
 - ✖ ... να αντιμετωπίζουν οποιοδήποτε πρόβλημα προκύπτει εντός περιορισμένου χρονικού διαστήματος (συνήθως μερικών ωρών).
 - ✖ ... η λειτουργία τους καταμετράται ως ***CMS service work***.



T2_GR_Ioannina : EGI → NGI_GRNET → GR-07-UOI-HEPLAB

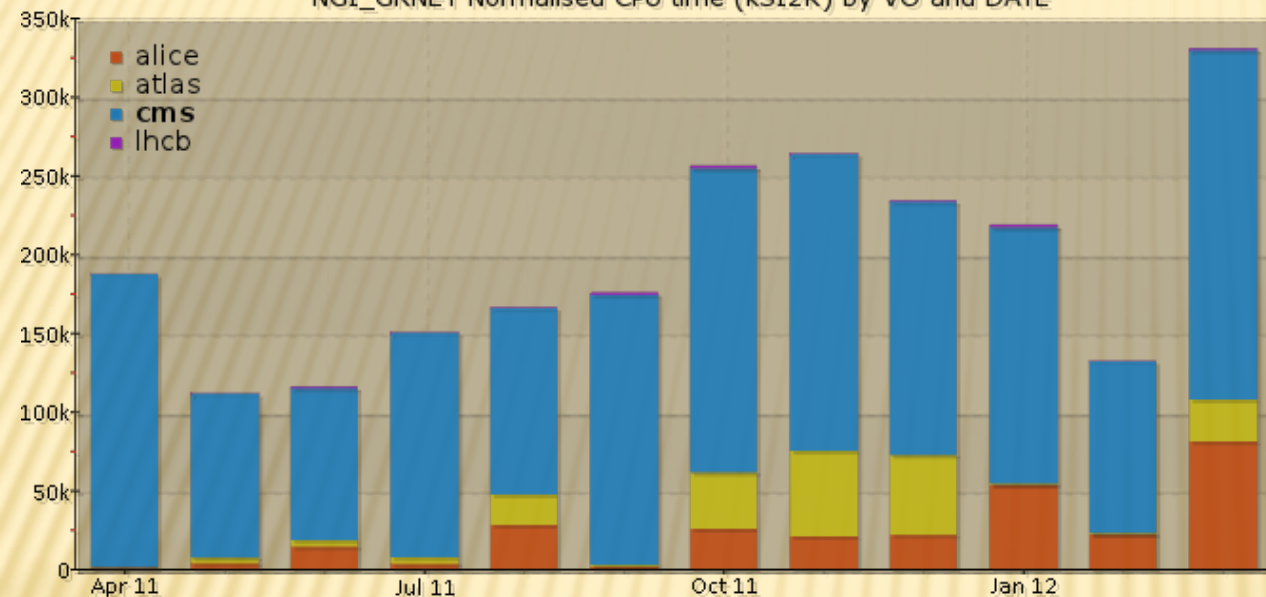
NGI_GRNET							
HG-06-EKT		GR-01-AUTH		GR-10-UOI		HG-02-IASA	
ce01.athena.hellasgrid.gr (CE)	ce02.athena.hellasgrid.gr (CE)	ce01.grid.auth.gr (CE)	cream-ce01.grid.auth.gr (CREAM-CE)	cream01.grid.uoi.gr (CREAM-CE)	se01.grid.uoi.gr (SRMv2)	ce01.marie.hellasgrid.gr (CE)	se01.marie.hellasgrid.gr (SRMv2)
				cream01.grid.uoi.gr (Site-BDII)		cream-ce01.marie.hellasgrid.gr (CREAM-CE)	site-bdi01.marie.hellasgrid.gr (Site-BDII)
		sbdi01.grid.auth.gr (Site-BDII)	se01.grid.auth.gr (SRMv2)				
cream01.athena.hellasgrid.gr (CREAM-CE)	cream02.athena.hellasgrid.gr (CREAM-CE)			HG-03-AUTH		HG-04-CTI-CEID	
				ce01.afroditi.hellasgrid.gr (CE)	sbdi01.afroditi.hellasgrid.gr (Site-BDII)	ce01.kallisto.hellasgrid.gr (CE)	cream01.kallisto.hellasgrid.gr (CREAM-CE)
				cream-ce01.afroditi.hellasgrid.gr (CREAM-CE)	se01.afroditi.hellasgrid.gr (SRMv2)	ce01.kallisto.hellasgrid.gr (Site-BDII)	se01.kallisto.hellasgrid.gr (SRMv2)
		GR-07-UOI-HEPLAB				HG-01-GRNET	
		grid01.physics.uoi.gr (CREAM-CE)	grid02.physics.uoi.gr (SRMv2)			ce01.isabella.gr (CE)	ce01.isabella.gr (Site-BDII)
mon.athena.hellasgrid.gr (Site-BDII)	se01.athena.hellasgrid.gr (SRMv2)			HG-05-FORTH		ce01.isabella.gr (SRMv2)	
				ce01.ariadni.hellasgrid.gr (CE)	se01.ariadni.hellasgrid.gr (SRMv2)		
						HG-07-StratusLab	
						vm133.gr (CE)	ce02.marie.hellasgrid.gr (CE)
						vm133.gr (Site-BDII)	se02.marie.hellasgrid.gr (SRMv2)
							ce02.marie.hellasgrid.gr (Site-BDII)
							di11.dius.gr (CREAM-CE)
		grid03.physics.uoi.gr (Site-BDII)		cream-ce01.ariadni.hellasgrid.gr (CREAM-CE)		vm134.grnet.stratuslab.gr (SRMv2)	di11.dius.gr (SRMv2)
						GR-04-CTI-CEID	
						ce01.isabella.gr (CE)	ce01.isabella.gr (Site-BDII)
							ce01.isabella.gr (SRMv2)
						GR-06-IASA	
						ce01.marie.hellasgrid.gr (CE)	ce02.marie.hellasgrid.gr (CE)
						ce01.marie.hellasgrid.gr (Site-BDII)	ce02.marie.hellasgrid.gr (SRMv2)
						GR-09-UOI	
						di01.dius.gr (CE)	di02.dius.gr (SRMv2)
							di01.dius.gr (SRMv2)
						GR-11-CTI-CEID	
						ce01.isabella.gr (CE)	ce01.isabella.gr (Site-BDII)
							ce01.isabella.gr (SRMv2)

πίσω στο
2012

Legend: ■ OK ■ Warning ■ Critical ■ Downtime ■ Unknown ■ Missing ■ N/A ■ Removed

T2_GR_Ioannina : στατιστικά

NGI_GRNET Normalised CPU time (kSI2K) by VO and DATE



Normalised CPU time [units 1K.SI2K.Hours] by SITE and DATE

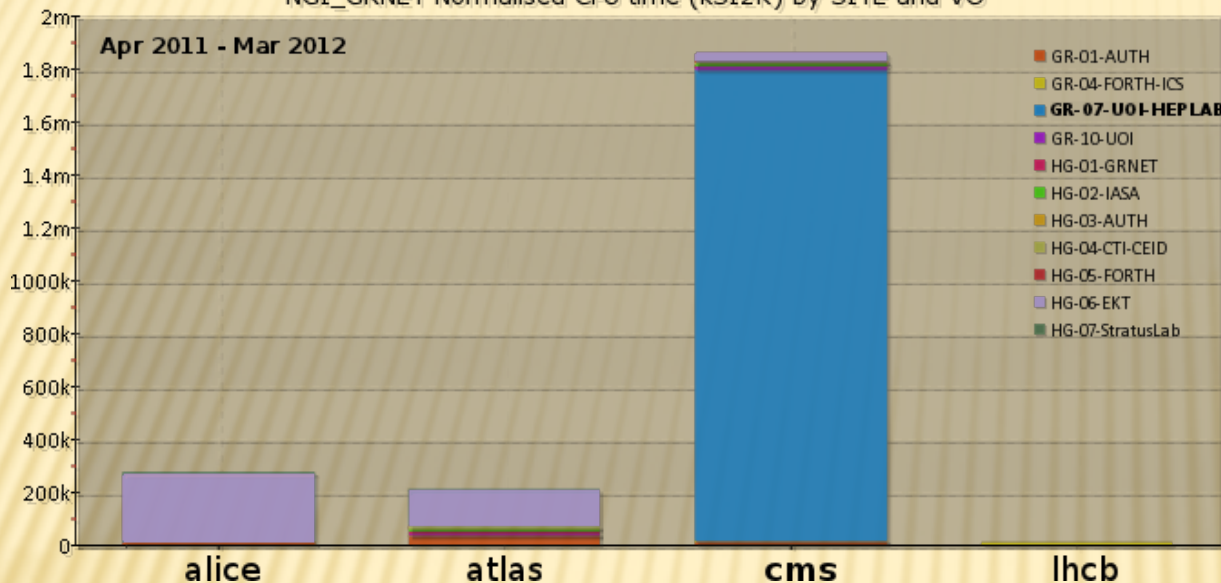
SITE	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Nov 11	Dec 11	Jan 12	Feb 12	Mar 12	Total	%
GR-01-AUTH	9,210	3,610	1,159	52	121	44	650	2,025	498	681	630	25,907	44,587	1.92%
GR-04-FORTH-ICS	1,267	680	66	42	407	1,234	288	168	95	185	176	5	4,613	0.20%
GR-07-UIO-HEPLAB	140,536	80,250	92,955	142,626	118,381	171,124	192,988	188,286	158,056	162,934	107,541	222,650	1,778,327	76.46%
GR-10-UIO	7,049	3,279	1,768	19	26	30	7,375	47	608	60	2	1	20,264	0.87%
HG-01-GRNET	3	24	5	5	6	5	1,872	3	19	4	4	3	1,953	0.08%
HG-02-IASA	5,684	3,791	1,177	943	995	890	10,304	901	1,952	1,207	1,039	209	29,092	1.25%
HG-03-AUTH	2,643	537	202	169	15	3	3	2	159	6	2	3	3,744	0.16%
HG-04-CTI-CEID	277	817	83	82	34	270	92	112	126	58	159	3	2,113	0.09%
HG-05-FORTH	4,890	4,099	259	11	8	9	3,047	6	4	9	8	43	12,393	0.53%
HG-06-EKT	14,455	13,052	16,733	4,905	44,822	752	38,265	70,878	71,011	52,245	21,159	80,410	428,687	18.43%
HG-07-StratusLab	0	0	0	4	5	4	12	2	4	6	5	2	44	0.00%
Total	186,014	110,139	114,407	148,858	164,820	174,365	254,896	262,430	232,532	217,395	130,725	329,236	2,325,817	
Percentage	8.00%	4.74%	4.92%	6.40%	7.09%	7.50%	10.96%	11.28%	10.00%	9.35%	5.62%	14.16%		

πίσω στο
2012



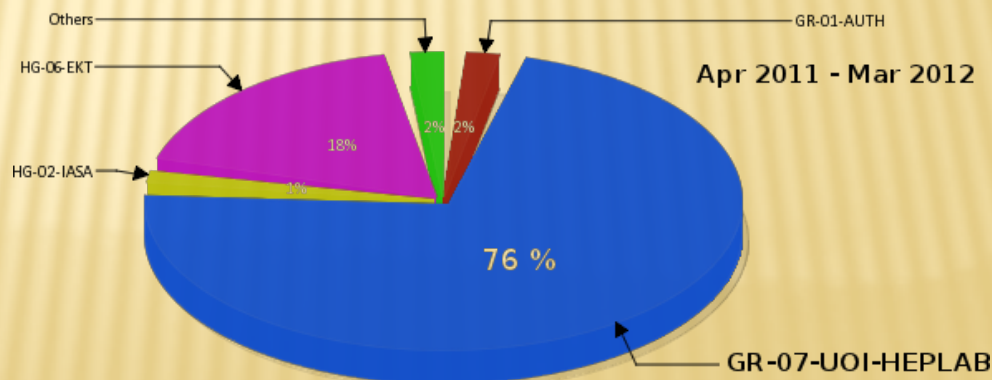
T2_GR_Ioannina : στατιστικά

NGI_GRNET Normalised CPU time (kSI2K) by SITE and VO



Χρόνος CPU που αφιερώθηκε σε εργασίες των LHC VOs στους επιμέρους ελληνικούς κόμβους GRID

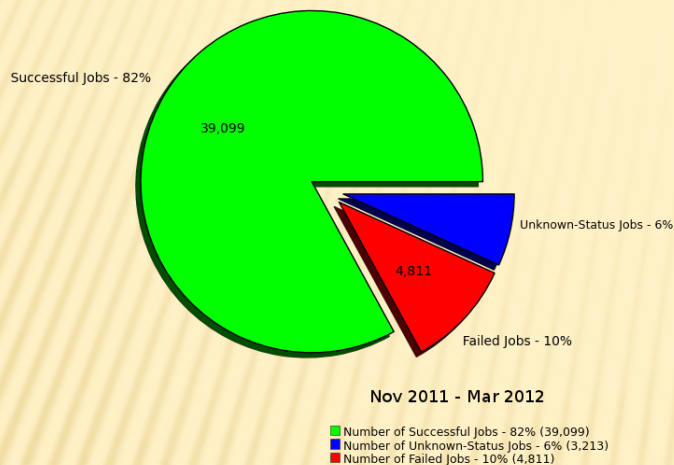
NGI_GRNET Normalised CPU time (kSI2K) per SITE



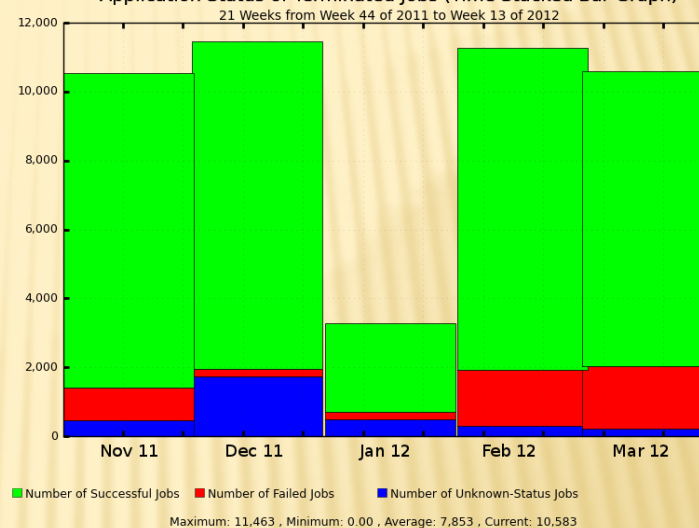
πίσω στο
2012

T2_GR_Ioannina : επιδόσεις

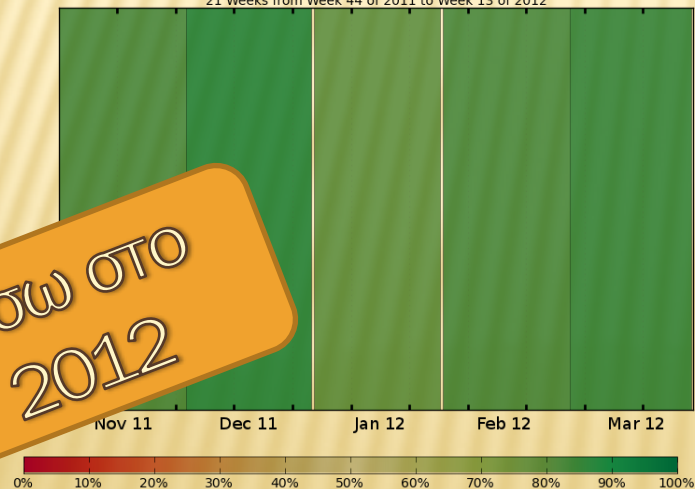
Application Status of Terminated Jobs (Pie Graph) (Sum: 47,123)



Application Status of Terminated Jobs (Time Stacked Bar Graph)



Efficiency based on success/failures
21 Weeks from Week 44 of 2011 to Week 13 of 2012



Πολλές εργασίες αποτυγχάνουν
εξαιτίας stageout timeouts.

Απώτερος λόγος: **100 Mbps** WAN link

πίσω στο
2012



T2_GR_Ioannina : Αναβάθμιση δικτυακής σύνδεσης

- ✗ σύνδεση **100 Mbps** = ανεπαρκής
 - + Σετ δεδομένων : ~ **μερικά Tbyte** → χρόνος μεταφοράς : ~ **εβδομάδες !!!**
 - + Κατά τη διάρκεια των μεταφορών δεδομένων
 - ✗ συχνές αποτυχίες των μεταφορών λόγω της πολύ μικρής ταχύτητας
 - ✗ αποτυχία εκτελούμενων εργασιών (stageout timeouts)
- ✗ CMS AnyData, Anytime, Anywhere (AAA) μέσω XROOTD
 - + Χρήση δεδομένων on-the-fly από απομακρυσμένους κόμβους
 - + Αυξημένες απαιτήσεις στην ταχύτητα δικτύου
 - + **Πλήρης αποτυχία με τη γραμμή των 100 Mbps**
- ✗ **1^η Αναβάθμιση** : Σεπτέμβριος 2015 → 1 Gbps (copper)
 - + Στην πραγματικότητα **500 Mbps**,
λόγω περιορισμών που τέθηκαν από το NOC του ΠΙ,
επειδή το T2_GR_Ioannina υπερφόρτωνε της γραμμή 1 Gbps του ΠΙ...
 - + Ο πενταπλασιασμός του εύρους ζώνης βοήθησε σαφώς,
όμως δεν έλυσε τα προβλήματα.
 - + Πιέσεις από το WLCG για αναβάθμιση της ταχύτητας σύνδεσης του κόμβου μας,
που στο μεταξύ αύξησε τις απαιτήσεις από έναν τυπικό κόμβο Tier-2.



T2_GR_Ioannina : Αναβάθμιση δικτυακής σύνδεσης

✖ Νοέμβριος 2015:

Πρόταση προς την ΕΔΕΤ στο πλαίσιο της ενότητας

«‘Οπτικά μονοπάτια’- Υπερ-Υψηλή Ταχύτητα και Ασφάλεια στην μεταφορά Δεδομένων»,
της πράξης

«Προηγμένες Δικτυακές Υπηρεσίες για την Ερευνητική και Ακαδημαϊκή Κοινότητα»,
με τίτλο

Σύνδεση υπερ-υψηλής ταχύτητας του κόμβου GRID GR-07-UOI-HEPLAB

για την άμεση σύνδεση στο δίκτυο LHCONE μέσω της ΕΔΕΤ με οπτική γραμμή **10 Gbps**

LHCONE : ευρυζωνικό δίκτυο αφιερωμένο στη διακίνηση δεδομένων των πειραμάτων του LHC.

✖ Έπειτα από την έγκριση της πρότασης από την ΕΔΕΤ:

- + Προδιαγραφές και αίτημα προμήθειας δικτυακού **εξοπλισμού** οπτικών ζεύξεων **10 Gbps**
- + Δρομολόγηση **εγκατάστασης οπτικών ινών** για τη σύνδεσης του ΕΦΥΕ με το NOC του ΠΙ
- + Φεβρουάριος 2016: **1 Gbps** (copper)
 - ✖ **Άρση περιορισμών** που είχαν τεθεί από το NOC του ΠΙ,
έπειτα από την αναβάθμιση της γραμμής του ΠΙ προς την ΕΔΕΤ στα 10 Gbps

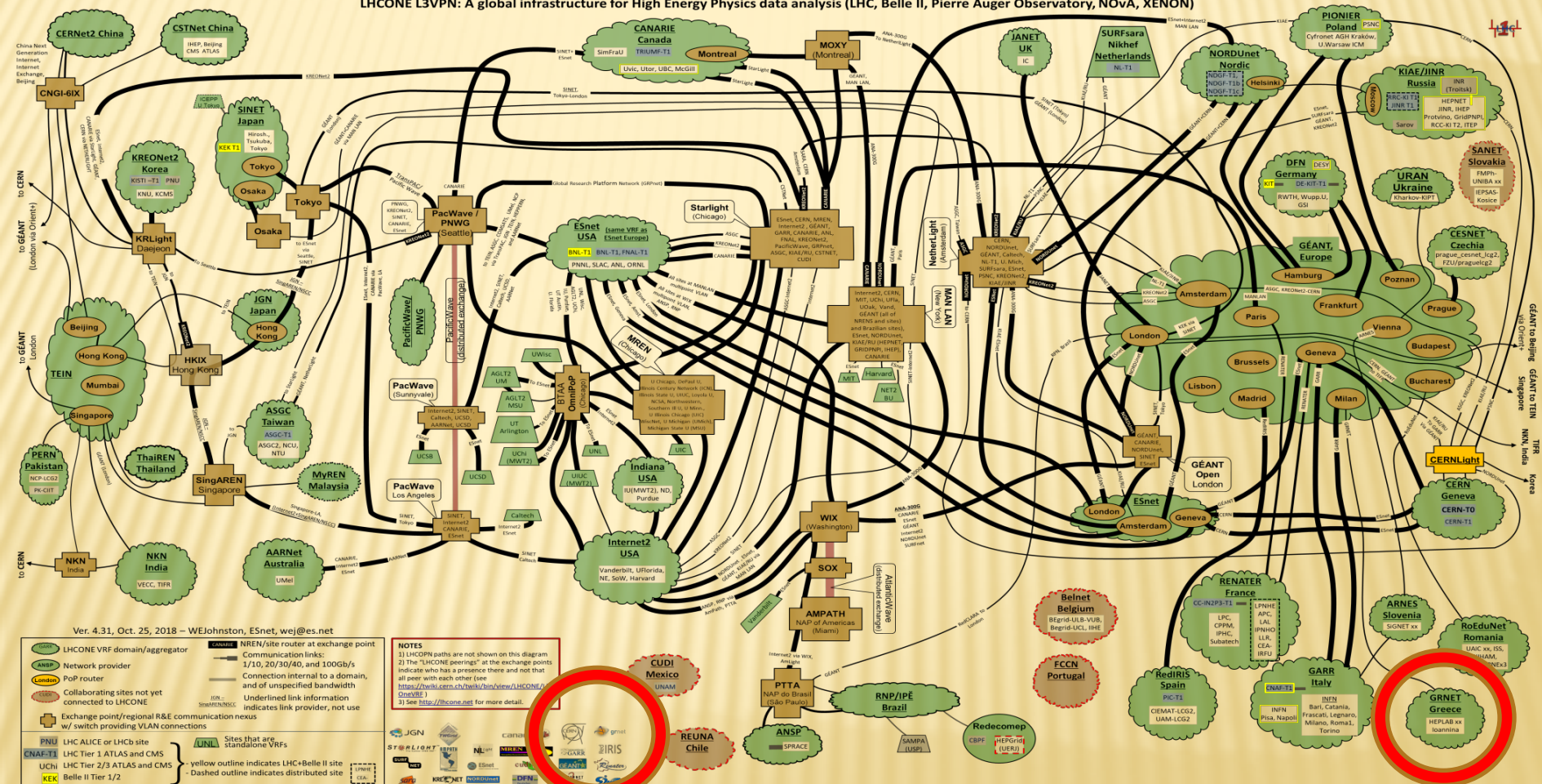
✖ Ιούνιος 2017:

- + **Ολοκλήρωση εγκαταστάσεων οπτικών ινών και δικτυακού εξοπλισμού**
- + **Σύνδεση του T2_GR_Ioannina μέσω οπτικής γραμμής 10 Gbps με το LHCONE**



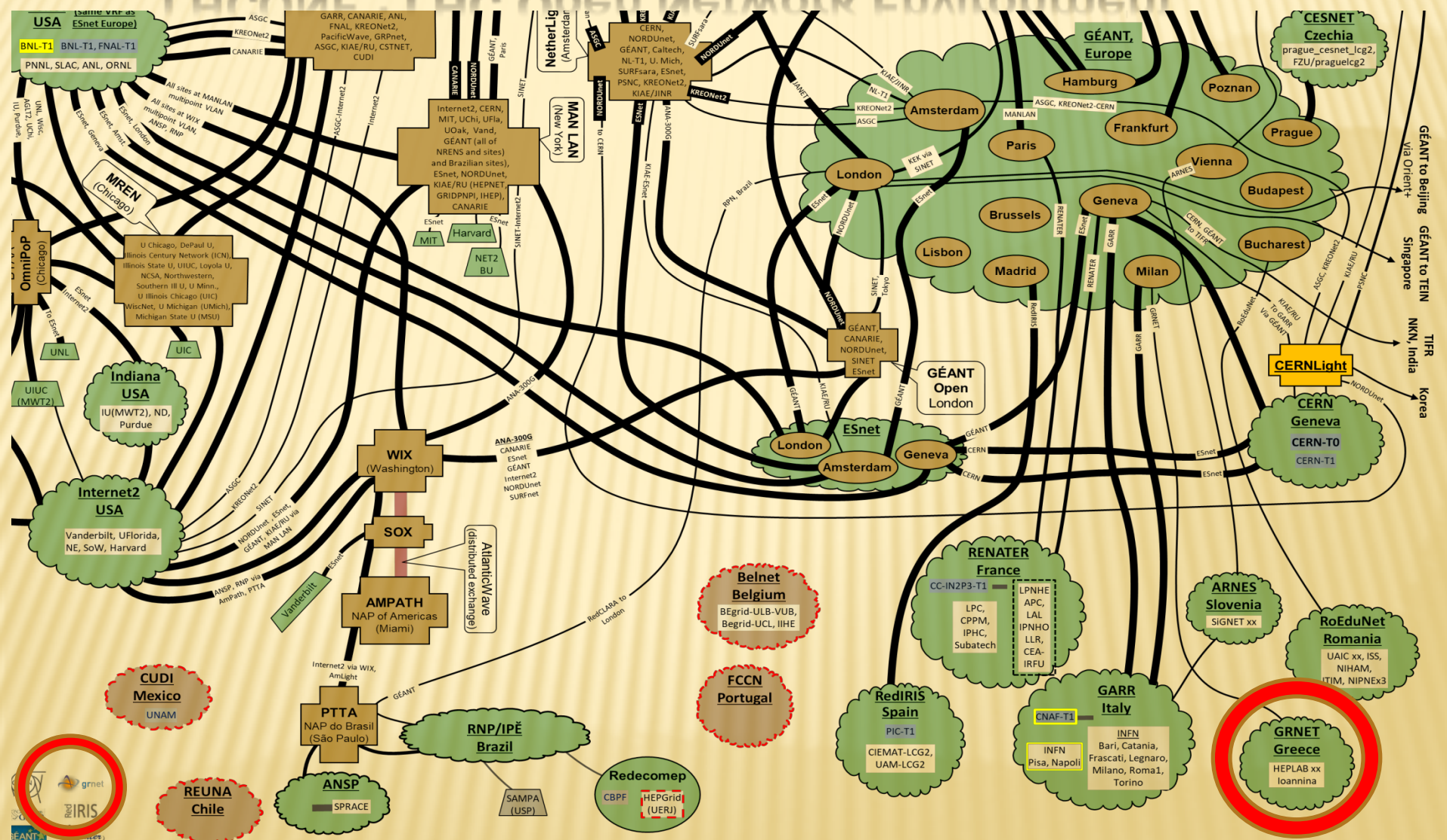
LHCONE : LHC Open Network Environment

LHCONE L3VPN: A global infrastructure for High Energy Physics data analysis (LHC, Belle II, Pierre Auger Observatory, NOvA, XENON)

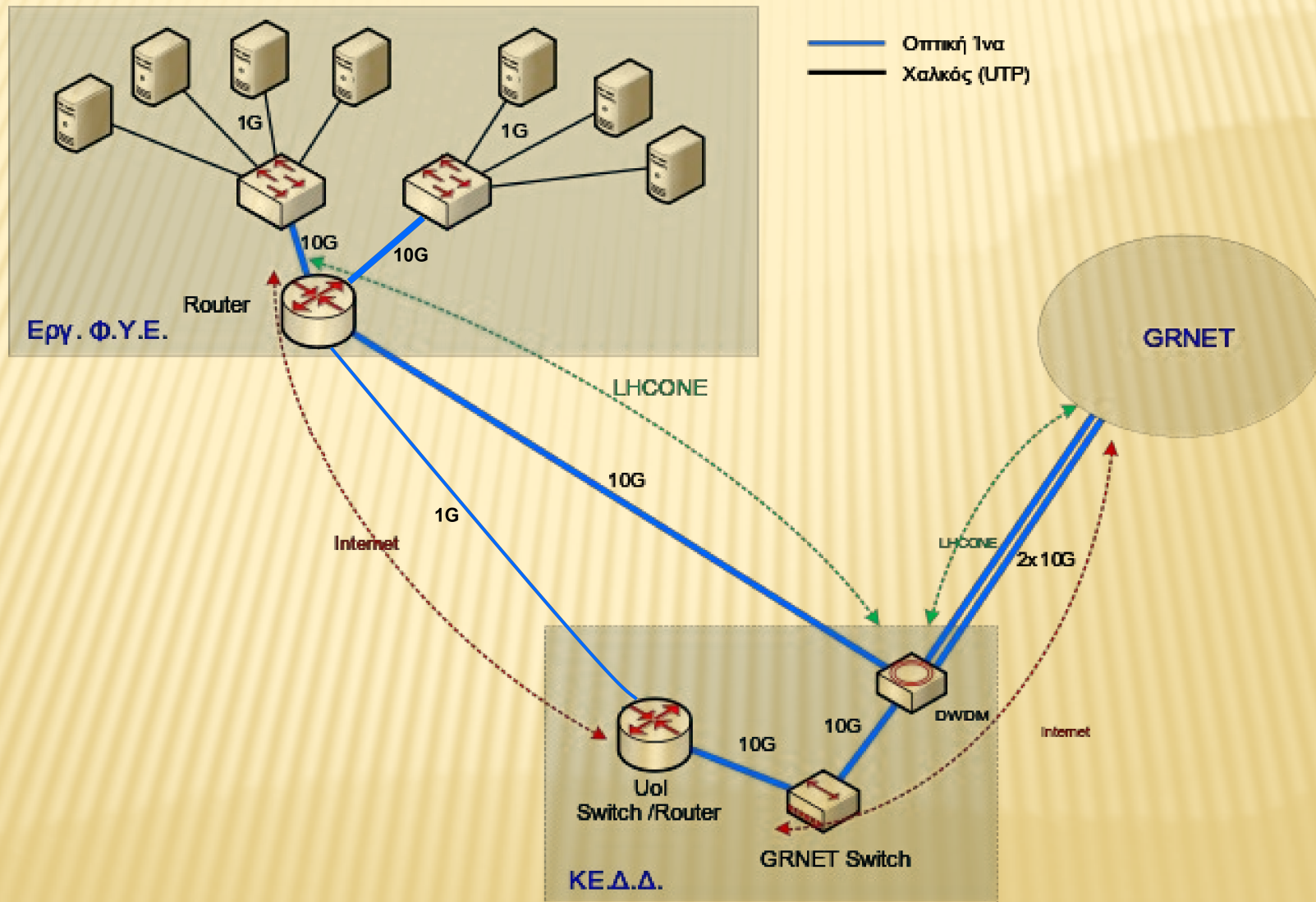




LHCONE : LHC Open Network Environment



T2_GR_Ioannina : τοπολογία δικτύου



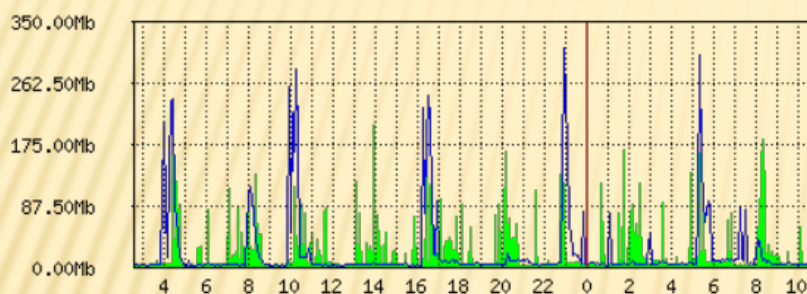
T2_GR_Ioannina : ταχύτητα δικτύου

Interface <sfp-sfpplus8> Statistics

• Last update: Sun Oct 14 10:35:10 2018

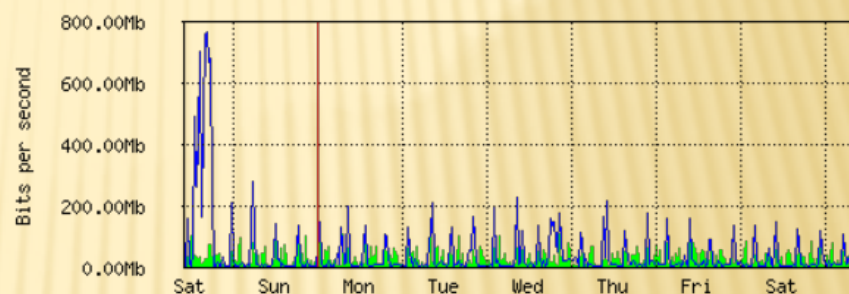
1 Gbps → UOI NOC → internet

"Daily" Graph (5 Minute Average)



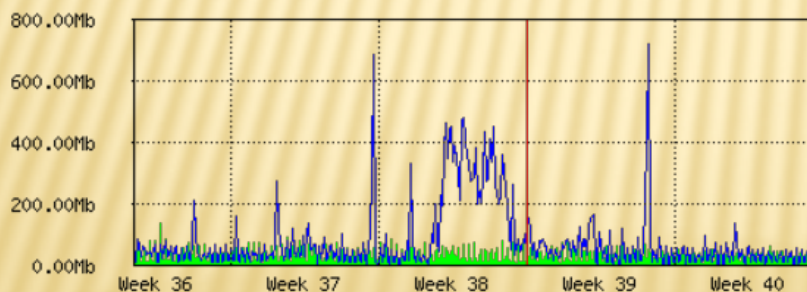
Max In: 201.94Mb; Average In: 24.02Mb; Current In: 98.20Mb;
Max Out: 314.70Mb; Average Out: 19.98Mb; Current Out: 5.01Mb;

"Weekly" Graph (30 Minute Average)



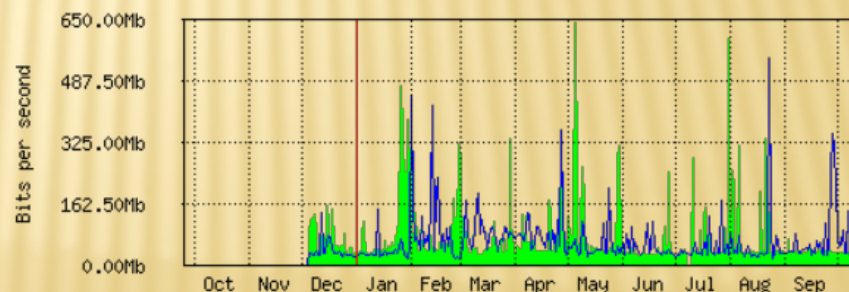
Max In: 110.89Mb; Average In: 27.23Mb; Current In: 25.90Mb;
Max Out: 768.34Mb; Average Out: 39.26Mb; Current Out: 2.82Mb;

"Monthly" Graph (2 Hour Average)



Max In: 130.48Mb; Average In: 29.90Mb; Current In: 33.55Mb;
Max Out: 725.18Mb; Average Out: 73.61Mb; Current Out: 7.46Mb;

"Yearly" Graph (1 Day Average)



Max In: 644.51Mb; Average In: 74.56Mb; Current In: 25.06Mb;
Max Out: 550.87Mb; Average Out: 58.26Mb; Current Out: 16.67Mb;

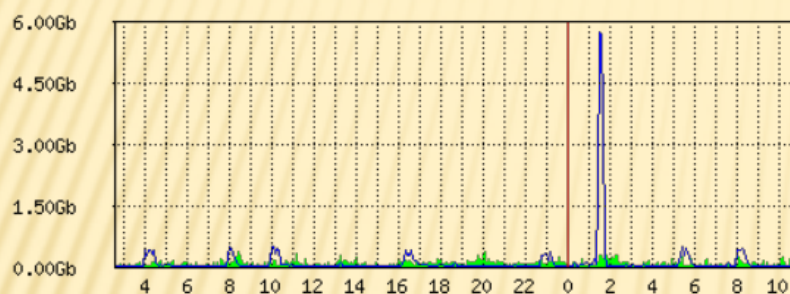
T2_GR_Ioannina : ταχύτητα δικτύου

Interface <sfp-sfpplus3> Statistics

• Last update: Sun Oct 14 10:35:10 2018

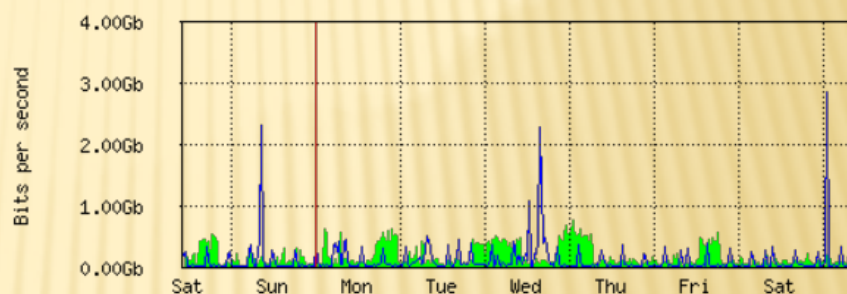
10 Gbps → LHCONC

"Daily" Graph (5 Minute Average)



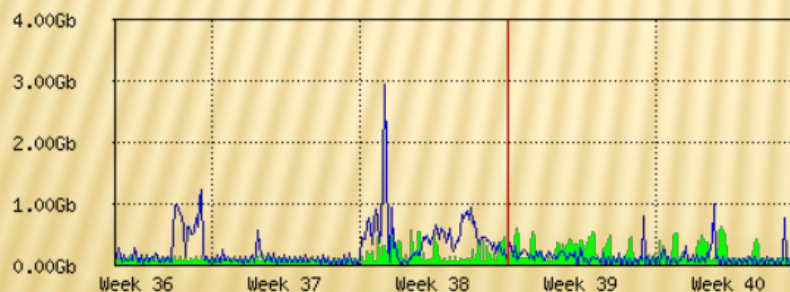
Max In: 334.00Mb; Average In: 60.44Mb; Current In: 123.99Mb;
Max Out: 5.77Gb; Average Out: 90.94Mb; Current Out: 2.33Mb;

"Weekly" Graph (30 Minute Average)



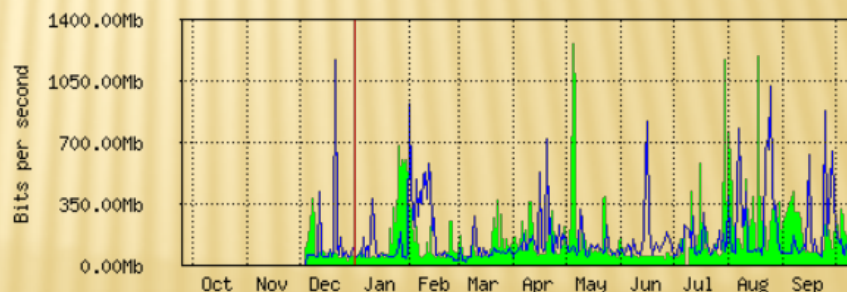
Max In: 748.04Mb; Average In: 156.96Mb; Current In: 88.28Mb;
Max Out: 2.87Gb; Average Out: 89.32Mb; Current Out: 7.16Mb;

"Monthly" Graph (2 Hour Average)



Max In: 612.78Mb; Average In: 140.00Mb; Current In: 52.12Mb;
Max Out: 2.96Gb; Average Out: 195.28Mb; Current Out: 100.04Mb;

"Yearly" Graph (1 Day Average)



Max In: 1.26Gb; Average In: 153.80Mb; Current In: 63.50Mb;
Max Out: 1.17Gb; Average Out: 144.54Mb; Current Out: 99.44Mb;



T2_GR_Ioannina : παρακολούθηση κατάστασης

- ✗ Συνεχής παρακολούθηση των υπηρεσιών του κόμβου
 - + αυτόματα NAGIOS τεστ από τους OPS and CMS VOs
 - + τοπικά προγράμματα παρακολούθησης για τον έλεγχο υπηρεσιών όπως:
 - ✗ Worker Nodes
 - ✗ PBS queues
 - ✗ DPM pool disks
 - ✗ XROOTD servers
 - ✗ PhEDEx data transfer agents
 - ✗ ...
 - + τοπικά προγράμματα αυτόματης επιδιόρθωση προβλημάτων και αποστολής ειδοποιήσεων σε περίπτωση αποτυχίας
- ✗ Τα αποτελέσματα των προγραμμάτων παρακολούθησης δημοσιεύονται άμεσα διαδικτυακά. Π.χ.
 - + <http://cern.ch/pyannis/GRID-stuff.php>
 - + <https://alpha.physics.uoi.gr/twiki/bin/view/HEPLAB/T2GrIoannina>
 - + [CMS Dashboard](#)



T2_GR_Ioannina : παρακολούθηση κατάστασης

Last updated on 14 Oct 2018 by Ioannis Papadopoulos

The **GR-07-UOI-HEPLAB** GRID site is named by CMS as **T2_GR_Ioannina**. You may find below some useful links about the status of the site and the datasets that are stored on the SE of the site.

WARNING: A valid grid certificate, installed on your web browser, is necessary for some of the links to be viewed.

1. **general information**
2. **current status (link to EGI VAPOR)**
3. **CMS Grid sites status**

a. T2_GR_Ioannina site (current status)

grid02.physics.uoi.gr / XR00TD				grid01.physics.uoi.gr / CREAM-CE								grid02.physics.uoi.gr / SRM		
14 Oct 2018, 06:54:11 EEST				org.ces.MI-squid	org.ces.MI-frontier	org.ces.MI-basil	org.ces.MI-squid-access	org.ces.MI-squid-fallback	org.ces.MI-ac	org.ces.MI-emu	org.ces.MI-isolation	org.ces.COREK-2ndSubnet	org.ces.MI-analysis	org.ces.SRM-GetPTDET
org.ces.S2-xrootd (connection)	org.ces.S2-xrootd (version)	org.ces.S2-xrootd (read)	org.ces.MI-squid (/ces/Phile/legends)	org.ces.MI-frontier (/ces/Phile/legends)	org.ces.MI-basil (/ces/Phile/legends)	org.ces.MI-squid-access (/ces/Phile/legends)	org.ces.MI-squid-fallback (/ces/Phile/legends)	org.ces.MI-ac (/ces/Phile/legends)	org.ces.MI-emu (/ces/Phile/legends)	org.ces.MI-isolation (/ces/Phile/legends)	org.ces.COREK-2ndSubnet (/ces/Phile/legends)	org.ces.MI-analysis (/ces/Phile/legends)	org.ces.SRM-GetPTDET (/ces/Phile/products)	org.ces.SRM-V0P01 (/ces/Phile/products)

b. T2_GR_Ioannina CE/SE status history (last 48h)

c. T2_GR_Ioannina AAA status (last 24h)

d. all Tier-2 sites (current status)

e. Site Availability Ranking Plot (last 30 days)

f. Site Reliability Ranking Plot (last 30 days)

g. Service Availability Plot (last 30 days)

4. CMS SW releases

a. available at T2_GR_Ioannina

Show

5. PhEDEx

a. DAS web interface

b. Data stored on the Storage Element (SE - grid02.physics.uoi.gr) of T2_GR_Ioannina)

c. Data transfer routing for GR_Ioannina

d. Data deletion requests for GR_Ioannina

e. Data verification for GR_Ioannina

f. PhEDEx agents status

Prod instance	Debug instance
i. Rate	i. Rate
ii. Rate Plot	ii. Rate Plot
iii. Link Status	iii. Link Status



T2_GR_Ioannina : παρακολούθηση κατάστασης

Current Network Status
Last Updated: Sun Oct 14 06:46:20 CEST 2018
Updated every 90 seconds
Nagios® Core™ 4.3.1 - www.nagios.org
Logged in as /C=GR/O=HellasGrid/OU=uoi.gr/CN=Ioannis Papadopoulos

View Service Status Detail For All Host Groups
View Host Status Detail For This Host Group
View Status Overview For This Host Group
View Status Summary For This Host Group
View Status Grid For This Host Group

Host Status Totals				
Up	Down	Unreachable	Pending	
4	0	0	0	
All Problems		All Types		
0		4		

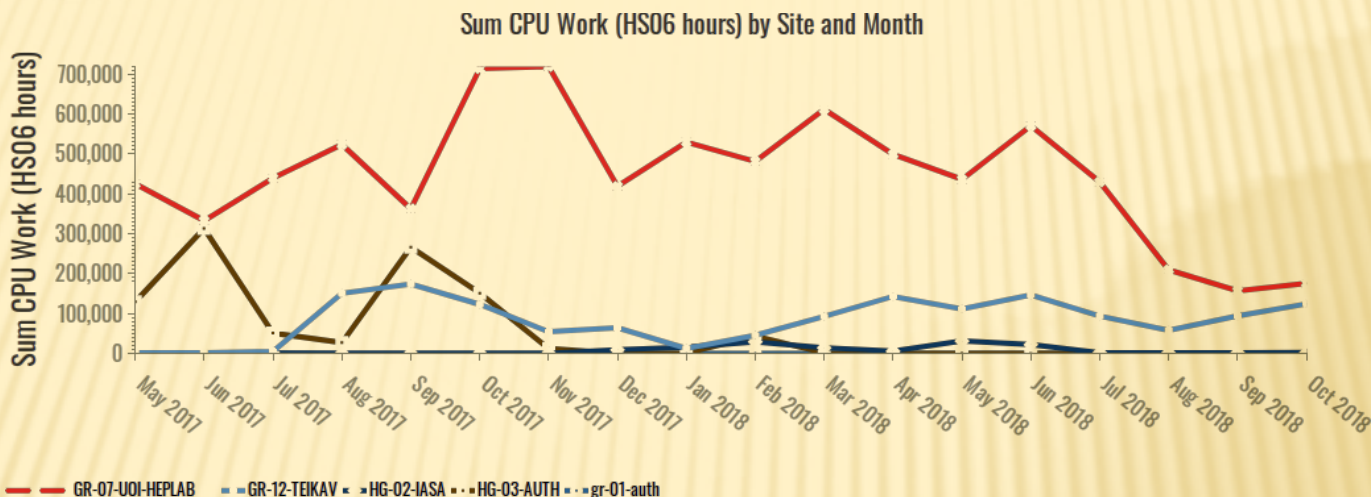
Service Status Totals				
Ok	Warning	Unknown	Critical	Pending
32	0	0	0	0
All Problems		All Types		
0		32		

Service Status Details For Host Group 'site-GR-07-UOI-HEPLAB'

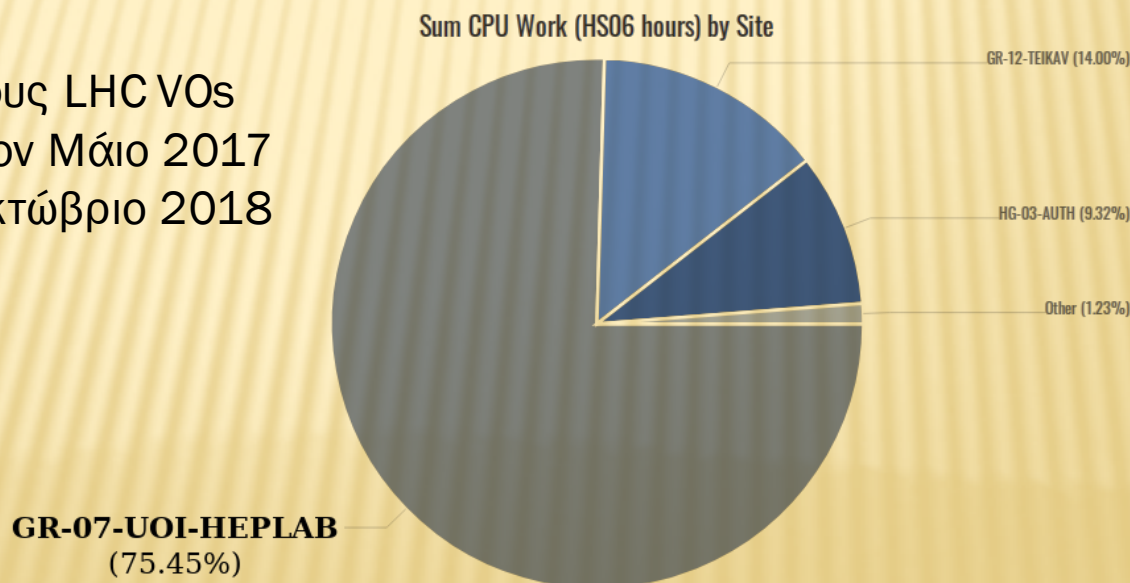
Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
alpha.physics.uoi.gr	eu.egi.sec.MyProxy-SL5	OK	10-13-2018 14:14:11	96d 16h 32m 7s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	hr.srce.MyProxy-CertLifetime	OK	10-14-2018 01:33:36	78d 17h 12m 42s	1/2	CERT LIFETIME OK - Certificate will expire in 143.47 days (Mar 6 10:50:27 2019 GMT)
	hr.srce.MyProxy-Store-ops	OK	10-14-2018 06:38:42	19d 13h 37m 47s	1/4	MyProxy OK - MyProxy credential created. Querying stored credential succeeded. MyProxy credential destroyed.
grid01.physics.uoi.gr	emi.cream.CREAMCE-AllowedSubmission-ops	OK	10-14-2018 06:38:36	38d 16h 38m 5s	1/2	OK: ENABLED
	emi.cream.CREAMCE-JobCancel-ops	OK	10-14-2018 06:19:28	1d 15h 26m 50s	1/2	OK: job cancelled
	emi.cream.CREAMCE-JobPurge-ops	OK	10-14-2018 06:04:28	26d 16h 41m 55s	1/2	OK: job purged
	emi.cream.CREAMCE-ServiceInfo-ops	OK	10-14-2018 06:39:38	38d 16h 36m 54s	1/2	OK: Service Version = [1.16.4 - EMI version: 3.17.1-el6]
	eu.egi.CREAM-IGTF	OK	10-13-2018 21:30:31	150d 10h 56m 25s	1/3	check_gtf_ca OK - Valid CA distribution version (1.93) found.
	eu.egi.sec.CREAM-SL5	OK	10-13-2018 14:15:39	96d 16h 30m 39s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	hr.srce.CREAMCE-CertLifetime	OK	10-14-2018 06:10:31	96d 20h 35m 47s	1/2	CERT LIFETIME OK - Certificate will expire in 143.28 days (Mar 6 10:50:18 2019 GMT)
grid02.physics.uoi.gr	org.apel.APEL-Pub	OK	10-13-2018 23:18:33	418d 14h 28m 52s	1/3	goc-accounting.grid-support.ac.uk: OK [last published 1 days ago: 2018-10-12] Check your site's status in http://goc-accounting.grid-support.ac.uk/rss/GR-07-UOI-HEPLAB_Pub.html
	org.apel.APEL-Sync	OK	10-13-2018 23:20:32	417d 15h 21m 49s	1/3	goc-accounting.grid-support.ac.uk: OK [last published 1 days ago: 2018-10-12] Check your site's status in http://goc-accounting.grid-support.ac.uk/rss/GR-07-UOI-HEPLAB_Sync.html
	eu.egi.sec.StoRM-SL5	OK	10-13-2018 14:15:42	96d 16h 30m 36s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	eu.egi.sec.dCache-2.10	OK	10-13-2018 14:15:44	96d 16h 30m 34s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	eu.egi.sec.dCache-2.13	OK	10-13-2018 14:15:45	96d 16h 30m 33s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	eu.egi.sec.dCache-3.0	OK	10-13-2018 14:15:47	96d 16h 30m 31s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	hr.srce.SRM2-CertLifetime	OK	10-14-2018 03:17:04	96d 17h 40m 41s	1/2	CERT LIFETIME OK - Certificate will expire in 143.40 days (Mar 6 10:50:19 2019 GMT)
	org.sam.SRM-AI-ops	OK	10-14-2018 06:02:11	14d 0h 44m 11s	1/4	OK: success.
	org.sam.SRM-DeI-ops	OK	10-14-2018 06:02:24	14d 0h 43m 57s	1/4	OK: File was deleted from SRM.
	org.sam.SRM-Get-ops	OK	10-14-2018 06:02:24	14d 0h 43m 58s	1/4	OK: File was copied from SRM. Diff successful.
grid03.physics.uoi.gr	org.sam.SRM-GetSURLs-ops	OK	10-14-2018 06:02:12	44d 18h 14m 14s	1/4	OK: Got SRM endpoint(s) and Storage Path(s) from BDII
	org.sam.SRM-GetTURLs-ops	OK	10-14-2018 06:02:20	14d 0h 44m 2s	1/4	OK: protocols OK-[xroot, gsiftp]
	org.sam.SRM-Ls-ops	OK	10-14-2018 06:02:17	14d 0h 44m 5s	1/4	OK: listing [ldpm/physics.uoi.gr/home/ops/testfile-pul-1539489732-30070cc7fc85.txt]-ok:
	org.sam.SRM-LsDir-ops	OK	10-14-2018 06:02:12	44d 18h 14m 14s	1/4	OK: Storage Path[/ldpm/physics.uoi.gr/home/ops]-ok:
	org.sam.SRM-Put-ops	OK	10-14-2018 06:02:16	14d 0h 44m 5s	1/4	OK: File was copied to SRM.
	eu.egi.sec.Argus-SL5	OK	10-13-2018 14:15:48	96d 16h 30m 30s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	eu.egi.sec.Site-BDII-SL5	OK	10-13-2018 14:15:50	96d 16h 30m 28s	1/1	BDII_ENTRIES_NUM OK - 0 entries found
	org.bdi.Entries	OK	10-14-2018 06:45:45	88d 11h 0m 44s	1/4	OK: time=0.17s, entries=4
	org.bdi.Freshness	OK	10-14-2018 05:55:32	96d 20h 50m 45s	1/4	OK: freshness=90s, entries=1
	org.bdi.GLUE2-Validate	OK	10-14-2018 02:08:46	38d 4h 37m 32s	1/2	OK - errors 0, warnings 0, info 2
	org.nagios.BDII-Check	OK	10-14-2018 06:40:56	44d 19h 5m 29s	1/4	LDAP OK - 0.168 seconds response time
	org.nagios.GLUE2-Check	OK	10-14-2018 06:25:46	44d 18h 20m 44s	1/3	BDII_ENTRIES_NUM OK - 1 entry found

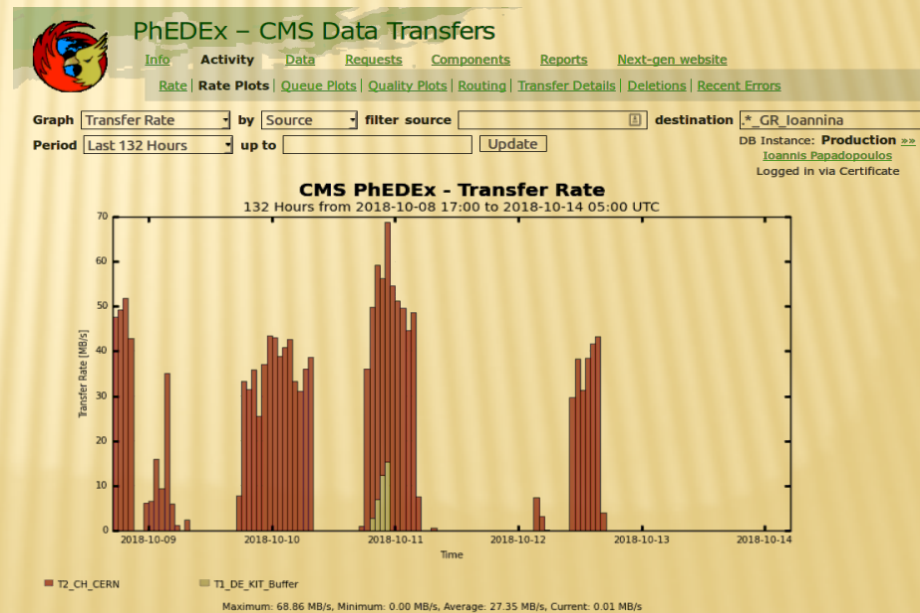
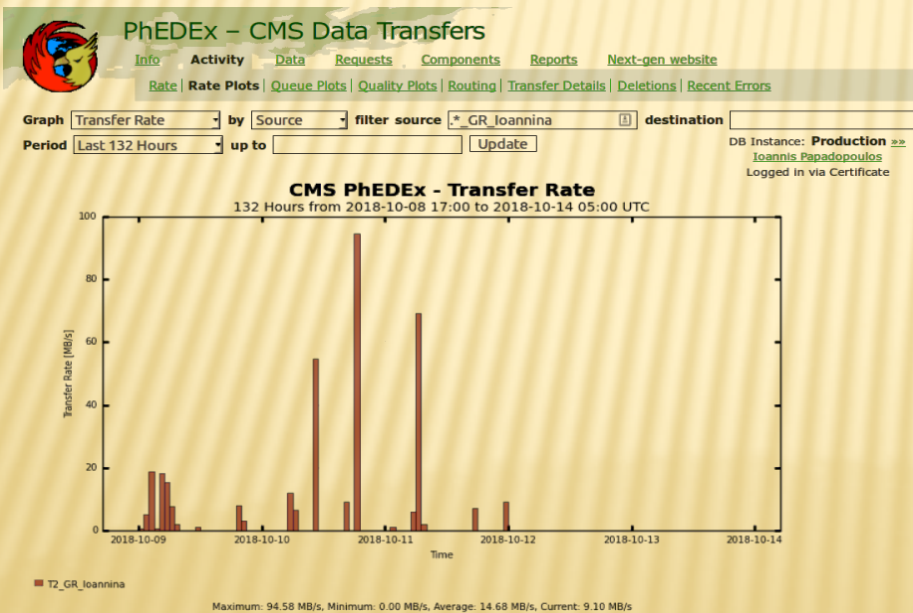
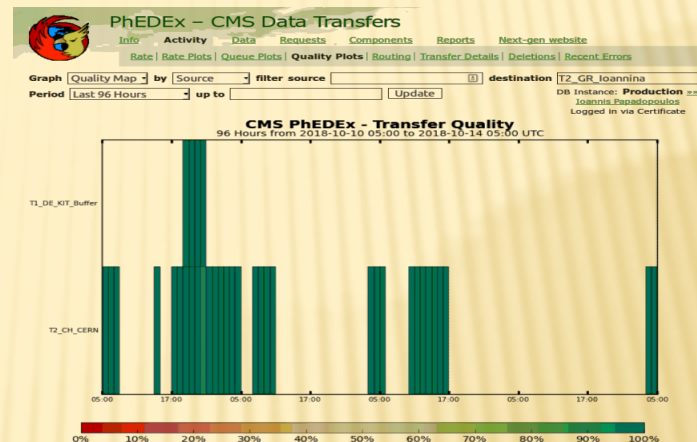
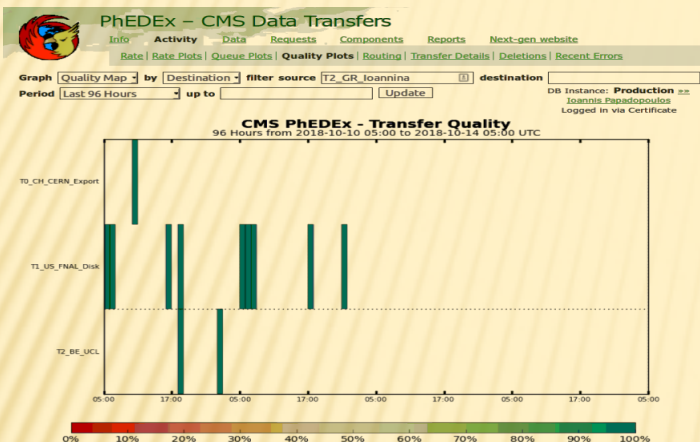
T2_GR_Ioannina : στατιστικά



Ώρες CPU για τους LHC VOs
από τον Μάιο 2017
έως τον Οκτώβριο 2018



T2_GR_Ioannina : PhEDEx transfers



T2_GR_Ioannina : παρακολούθηση κατάστασης

			T2_GR_Ioannina																												
LifeStatus:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Site Readiness:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Maintenance:	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	
HammerCloud:	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
SAM Availability:	100%	100%	100%	100%	94%	100%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Good T2 links from T1s:	15/15	13/15	15/15	14/15	13/15	15/15	15/15	14/15	14/15	14/15	13/15	14/15	14/15	13/15	14/15	13/15	12/15	15/15	11/13	12/13	13/13	14/15	15/15	12/13	13/13	14/15	15/15	12/13	13/13	14/15	
Good T2 links to T1s:	15/15	13/14	12/13	12/13	13/13	11/13	14/14	12/13	13/13	12/13	12/13	12/13	12/13	12/13	11/14	10/13	11/13	11/13	9/11	11/11	12/13	13/14	14/15	15/15	12/13	13/13	14/15	15/15	12/13	13/13	
Active T2 links from T1s:	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
Active T2 links to T1s:	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31									
	Oct																														

Report made on 2018-10-31 17:38:07 (UTC)

AAA Report, updated on 2018-10-14 at 06:31:24

Condition

IF (HC::xrootd rate > 70% OR site is tier 3) AND SAM::xrootd-access > 50 AND site has no AAA related ticket :
 site is good/green
 ELSE:
 site is bad/red

Explanation

- SAM (xrootd-access) and HC (xrootd) rows represent **average success rate of last 2 weeks** starting from the given date
 - Values are scaled between red(low) and green(high) color
- GGUS row shows number of AAA related tickets. If there is no ticket, it is represented as green for the given date
- Time window of the table is **2 weeks** (please go over one of the rows and see the date and value)

Result

T2_GR_Ioannina	
SAM	
HC	
GGUS	



T2_GR_Ioannina : παρακολούθηση κατάστασης

Services of Host grid01.physics.uoi.gr 13 rows /C=GR/O=HellasGrid/OU=uoi.gr/CN=Ioannis Papadopoulos

State	Service	Icons	Status detail	Age	Checked / Part OK
OK	org.cms.WN-analysis/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-07-09 10:40:14	6 min
OK	org.cms.WN-basic/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-09-27 09:43:48	6 min
OK	org.cms.WN-cvmfs/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: cvmfs vers 2.5.1 (probe 1.3-pre2)	2018-07-14 12:32:56	6 min
OK	org.cms.WN-env/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-05-25 18:19:54	16 min
OK	org.cms.WN-frontier/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-07-10 17:34:20	6 min
OK	org.cms.WN-isolation/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-07-19 16:31:46	16 min
OK	org.cms.WN-mc/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-05-25 18:19:54	6 min
OK	org.cms.WN-remoteaccess/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	22 hrs	6 min
OK	org.cms.WN-squid/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-10-05 11:53:00	6 min
OK	org.cms.WN-xrootd-access/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: Global redirector error	2018-09-19 06:15:24	6 min
OK	org.cms.WN-xrootd-failback/cms/Role-tgadmin		grid17.physics.uoi.gr: OK: OK	2018-10-12 04:26:11	6 min
OK	org.sam.CONDOOR-JobState/cms/Role-tgadmin		OK [JDL] 28150580	2018-09-17 14:05:02	10 min
OK	org.sam.CONDOOR-JobSubmit/cms/Role-tgadmin		OK COMPLETED	2018-09-17 14:06:46	16 min

dash dashboard Index Expanded Table

Show 200+ entries

Site Name	Visible	Active T2s	Site Readiness	HC glidein	SAM3	Good links	Commissioned Links	Production	Analysis	Site usage	In_rate_phedex	Out_rate_phedex	Topology/Maintenances	GGUS
T2_GR_Ioannina	OK	1	OK	OK	SAM3 CE SAM3 SRM	OK	OK	2% monitored	82% (882)	Running Pending	44 3	5 6	1 success 1 error 1 warn	

Showing 1 to 1 of 1 entries (filtered from 132 total entries)

First Previous 1 Next Last

Time Range and Sorting
From: 2018-10-30 19:33 To: 2018-10-31 19:33 Sort by: activity Scale: Bars Number: 20

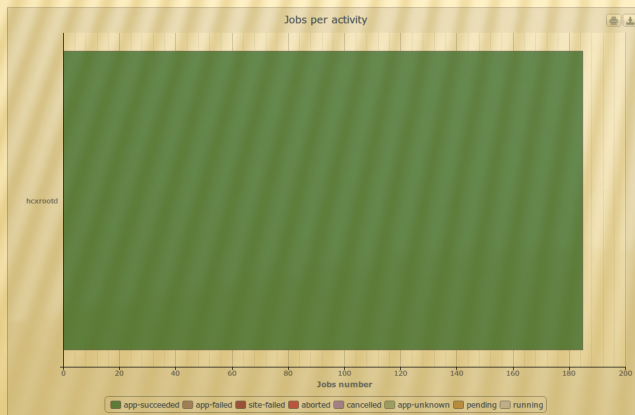
Jobs Attributes
User: T2_GR_Ioannina Site: T2_GR_Ioannina Submission Tools: Any tool Applications: Activities: hccruid Status: Select options Check: Terminated

Tier: Any tier Submission list: Any type

Submit

Start x Jobs Table Chart Expanded task name

Main Jobs Chart

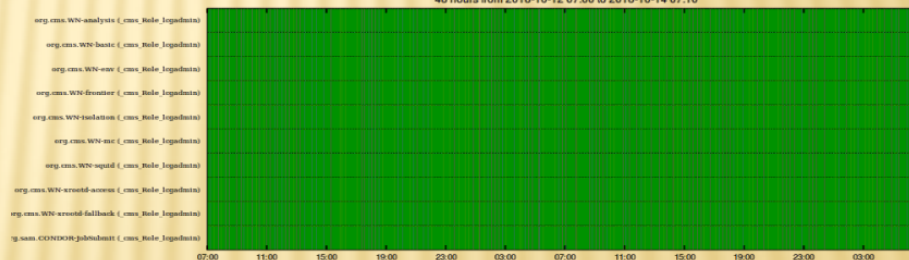


Algorithm for calculating the Site and Service Availability

grid01.physics.uoi.gr Link to data

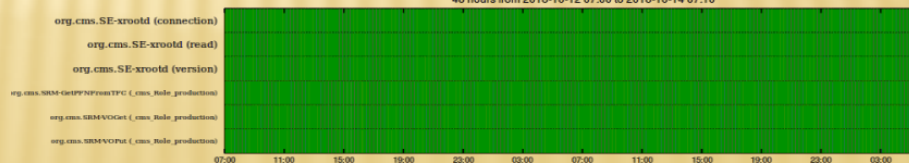
Test history grid01.physics.uoi.gr using CMS_CRITICAL_FULL

48 hours from 2018-10-12 07:00 to 2018-10-14 07:10



Test history grid02.physics.uoi.gr using CMS_CRITICAL_FULL

48 hours from 2018-10-12 07:00 to 2018-10-14 07:10





T2_GR_Ioannina : παρακολούθηση κατάστασης

HammerCloud | CMS

[Home](#) [Tests](#) [Reports](#) [Robot](#) [More HC...](#) [Help](#) [Administration](#)[« Back](#)

Test 66657

Can not clone functional tests - Modify

[Overall](#) [Sites](#) [Metrics](#) [Jobs](#) [Evolution](#) [Alarms](#) [Logs](#)

Summary

state	id	host	clouds	start time (CET)	end time (CET)	total jobs
running	66657	hammercloud-ai-34	CNAF	12/10/2018 12:30	14/10/2018 13:58	3978

Input type: CMSSW_9_2_6

Input DS Patterns: /GenericTTbar/HC-CMSSW_9_2_6_91X_mcRun1_realistic_v2-v2/AODSIM

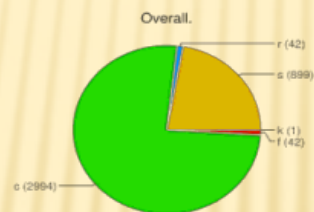
Ganga Job Template: crab3apitest9_short.tpl [\[View template file in GitLab\]](#)

User code: miniaodsim_9xx.py

Option file: empty

Template: functional T2 IT

Logs

[more plots »](#)

Sites

Show 50 entries

Search:

Site	S	R	C	F	Eff	T	Datasets	Queue	Max R	Resubmit	R. Force	Link
T3_IT_Trieste	149	4	510	0	1.00	663	1	9	30	yes	no	»
T2_IT_Rome	149	11	460	42	0.92	663	1	9	30	yes	no	»
T2_IT_Pisa	150	7	506	0	1.00	663	1	9	30	yes	no	»
T2_IT_Legnaro	151	6	506	0	1.00	663	1	9	30	yes	no	»
T2_IT_Bari	150	8	505	0	1.00	663	1	9	30	yes	no	»
T2_GR_Ioannina	150	6	507	0	1.00	663	1	9	30	yes	no	»

Site

S

R

C

F

Eff

T

Datasets bulk

Min queue

Max running

Resubmit

R. Force

Link

Showing 1 to 6 of 6 entries

[First](#) [Previous](#) [1](#) [Next](#) [Last](#)



T2_GR_Ioannina : REBUS WLCG pledges

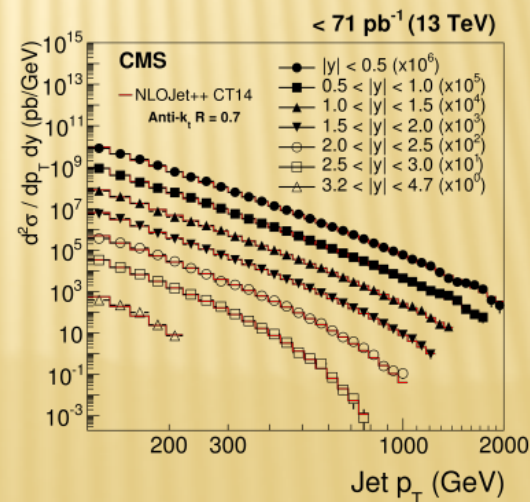
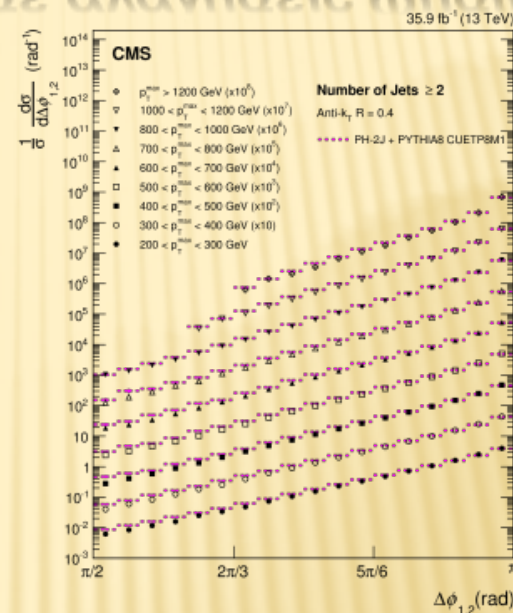
WLCG RSource, Balance & USage													WLCG Home	Contact	GGUS	Admin Login
REBUS: Federation Resources																
Topology Pledges Capacities Report Trends Accounting																
Pledges > Federation Resources																
Year: 2018																
Note: Sorting by multiple columns at the same time can be activated by 'shift' clicking on the column headers which they want to add to the sort. Hovering mouse over the column headers to get descriptions of table columns.																
All Tiers Tier 0 Tier 1 Tier 2																
JSON CSV XLSX Search:																
Country	Federation	Pledge Type	ALICE	% of Req.	ATLAS	% of Req.	CMS	% of Req.	LHCb	% of Req.	SUM	% of Req.				
Germany	GSI, Darmstadt	CPU (HEP-SPEC06)	28,000	9%							28,000	9%				
Germany	GSI, Darmstadt	Disk (Tbytes)	2,600	9%							2,600	9%				
Germany	LHCb Federation DESY	CPU (HEP-SPEC06)							8,050	6%	8,050	6%				
Germany	LHCb Federation DESY	Disk (Tbytes)							17	0%	17	0%				
Greece	GRID LAB, KAVALA Institute of Technology	CPU (HEP-SPEC06)			0	0%	0	0%			0	0%				
Greece	GRID LAB, KAVALA Institute of Technology	Disk (Tbytes)			0	0%	0	0%			0	0%				
Greece	HEP Laboratory, University of Ioannina	CPU (HEP-SPEC06)					1,870	0%			1,870	0%				
Greece	HEP Laboratory, University of Ioannina	Disk (Tbytes)					200	0%			200	0%				
Hungary	HGCC Federation	CPU (HEP-SPEC06)	5,500	2%			11,000	1%			16,500	1%				
Hungary	HGCC Federation	Disk (Tbytes)	540	2%			800	1%			1,340	1%				

Found a bug?

T2_GR_Ioannina : συνεισφορά σε αναλύσεις Φυσικής

✕ Επιλεγμένες δημοσιεύσεις ερευνητών του Εργαστηρίου Φυσικής Υψηλών Ενεργειών:

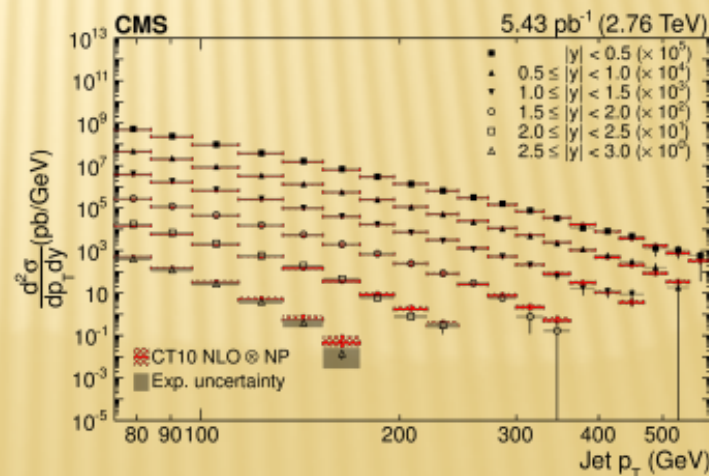
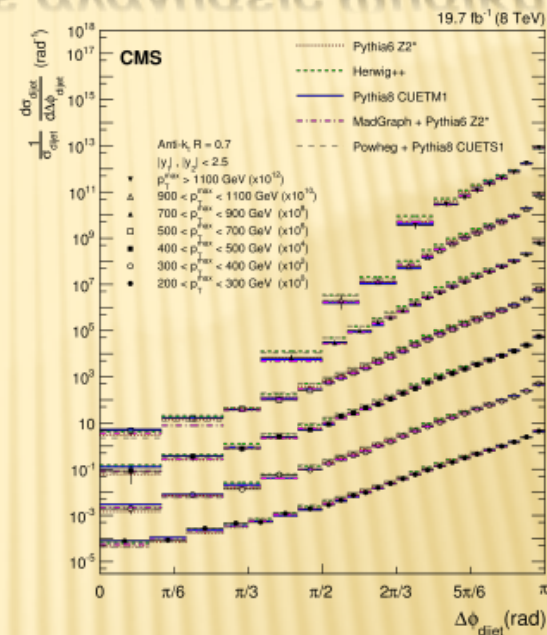
1. Azimuthal correlations for inclusive 2-jet, 3-jet, and 4-jet events in pp collisions at $\sqrt{s}=13$ TeV, CMS Collaboration, Eur. Phys. J. C 78 (2018) 566
2. Measurement of the double-differential inclusive jet cross section in proton-proton collisions at $\sqrt{s}=13$ TeV, CMS Collaboration, Eur. Phys. J. C 76 (2016) 451



T2_GR_Ioannina : συνεισφορά σε αναλύσεις Φυσικής

- ✗ Επιλεγμένες δημοσιεύσεις ερευνητών του Εργαστηρίου Φυσικής Υψηλών Ενεργειών:

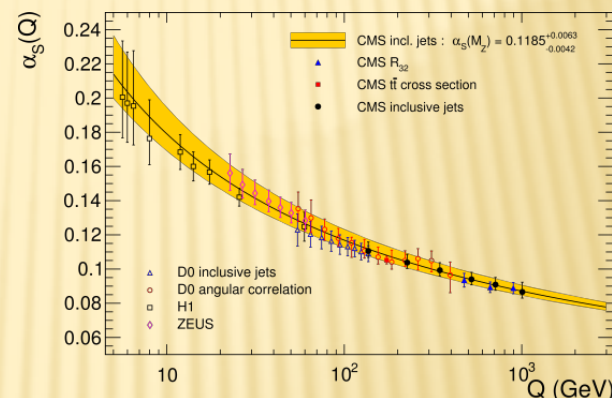
- Measurement of dijet azimuthal decorrelation in pp collisions at $\sqrt{s}=8$ TeV, CMS Collaboration, EPJC 76 (2016) 536
- Measurement of the inclusive jet cross section in pp collisions at $\sqrt{s}=2.76$ TeV CMS Collaboration, Eur. Phys. J. C 76 (2016) 265



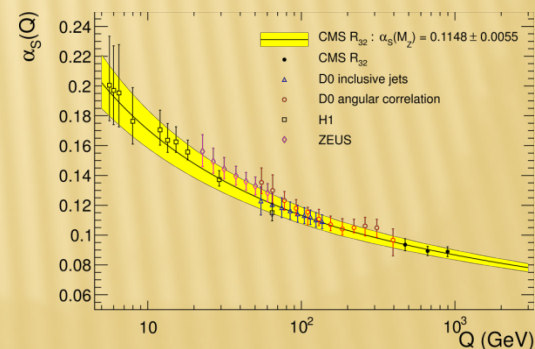
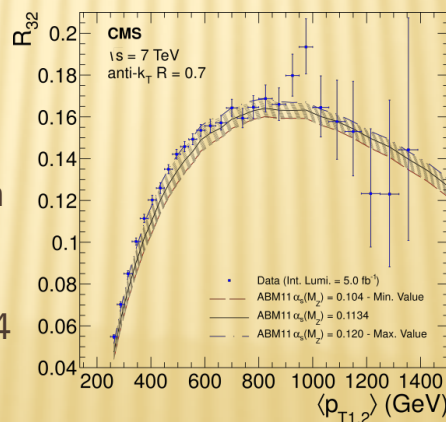
T2_GR_Ioannina : συνεισφορά σε αναλύσεις Φυσικής

- ✗ Επιλεγμένες δημοσιεύσεις ερευνητών του Εργαστηρίου Φυσικής Υψηλών Ενεργειών:

- Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at $\sqrt{s} = 7$ TeV, CMS Collaboration, Eur. Phys. J. C 75 (2015) 288



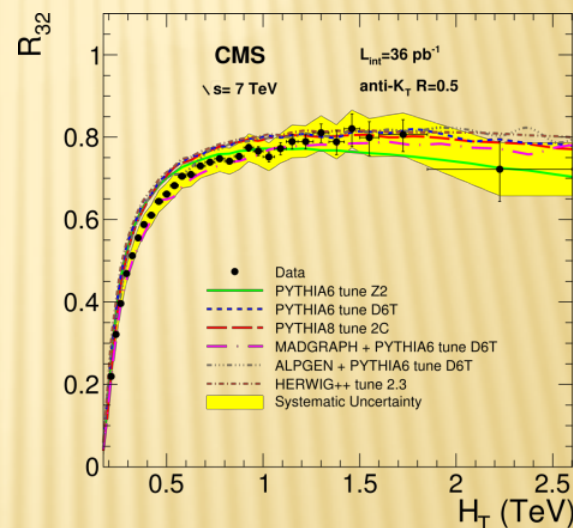
- Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at $\sqrt{s} = 7$ TeV and first determination of the strong coupling constant in the TeV range, CMS Collaboration, Eur. Phys. J. C 73 (2013) 2604



T2_GR_Ioannina : συνεισφορά σε αναλύσεις Φυσικής

- ✗ Επιλεγμένες δημοσιεύσεις ερευνητών του Εργαστηρίου Φυσικής Υψηλών Ενεργειών:

- Measurement of the Ratio of the 3-jet to 2-jet Cross Sections in pp Collisions at $\sqrt{s} = 7$ TeV, CMS Collaboration, Phys. Lett. B 702 (2011) 336-354





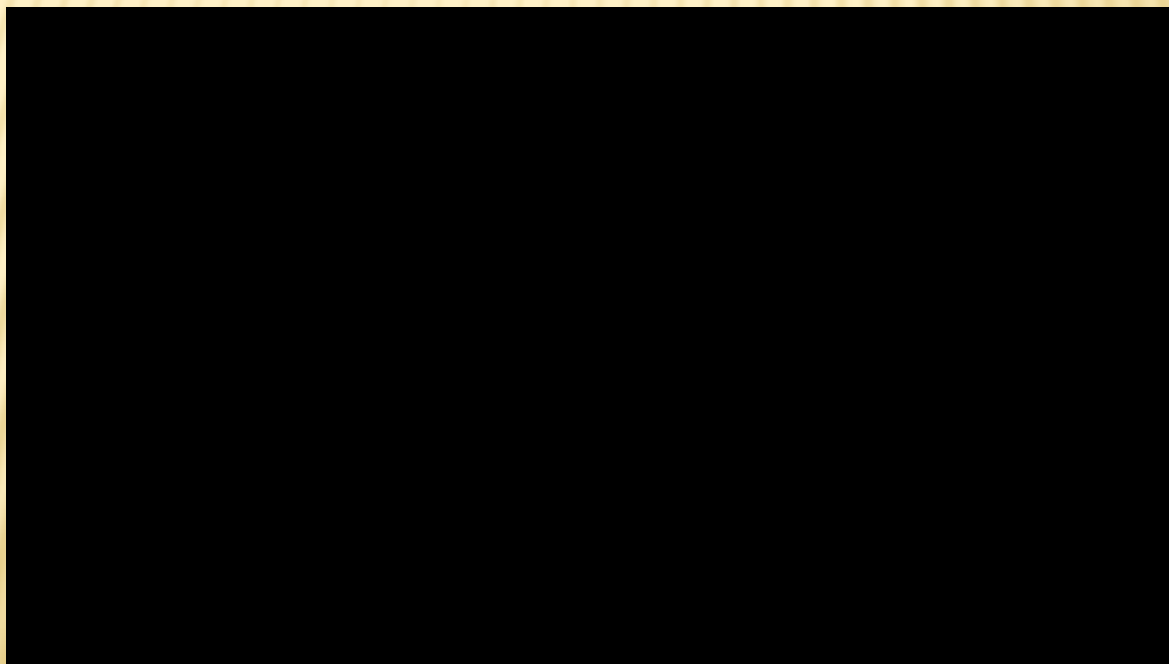
Σύνοψη για τον κόμβο T2_GR_Ioannina

- ✗ Πρόκειται για έναν μικρού μεγέθους κόμβο GRID WLCG Tier-2
 - + 156 CPUs / χώρος αποθήκευσης ~210 TByte
- ✗ Χαμηλό κόστος : Έως τώρα έχει συνολικά κοστίσει ~80 kEUR
- ✗ Αξιοπιστία & διαθεσιμότητα : ~100%
- ✗ Αποκλειστική χρήση για τον CMS VO
 - + Δίνοντας προτεραιότητα στους τοπικούς χρήστες του ΕΦΥΕ
 - + Άμεση πρόσβαση της πειραματικής ομάδας του ΕΦΥΕ
 - ✗ στην υπολογιστική ισχύ του
 - ✗ σε δεδομένα (on-site ή on-the-fly μέσω AAA/LHCONE)
- ✗ Έχουν ήδη εκπαιδευτεί σε αυτόν πολλοί μεταπτυχιακοί φοιτητές και υποψήφιοι διδάκτορες
- ✗ Έχει συνεισφέρει στις αναλύσεις Φυσικής της ομάδας του ΕΦΥΕ, και στις σχετικές δημοσιεύσεις
- ✗ Το μέλλον του κόμβου (λόγω και της παλαιότητας του εξοπλισμού)
 - + εξαρτάται από τη χρηματοδότηση.
 - ✗ Οι μέχρι τώρα προσπάθειες μέσω διαφόρων ερευνητικών προτάσεων δεν ευδοκίμησαν...
 - + Η 5-ετής υποχρέωση τήρησης των όρων του MoU έχει ήδη παρέλθει
 - + Αποτίμηση του αν «αξίζει» η όλη προσπάθεια (συντήρηση και καλή λειτουργία 24/7) για τα 0.38 FTEs CMS service που πλέον αποδίδει



Ευχαριστίες

- ✕ ... στην **ΕΔΕΤ ΑΕ** που μας έδωσε τη δυνατότητα πρόσβασης στο LHCONE με ταχύτητα 10 Gbps, εγκρίνοντας και υλοποιώντας την πρόταση
«Σύνδεση υπερ-υψηλής ταχύτητας του κόμβου GRID GR-07-UOI-HEPLAB»
- ✕ ... στους ανθρώπους του **NOC** του **ΠΙ**,
για την πολύτιμη τεχνική τους υποστήριξη και βοήθεια





ΕΠΙΠΛΕΟΝ ΥΛΙΚΟ...



T2_GR_Ioannina : PhEDEx transfers



PhEDEx – CMS Data Transfers

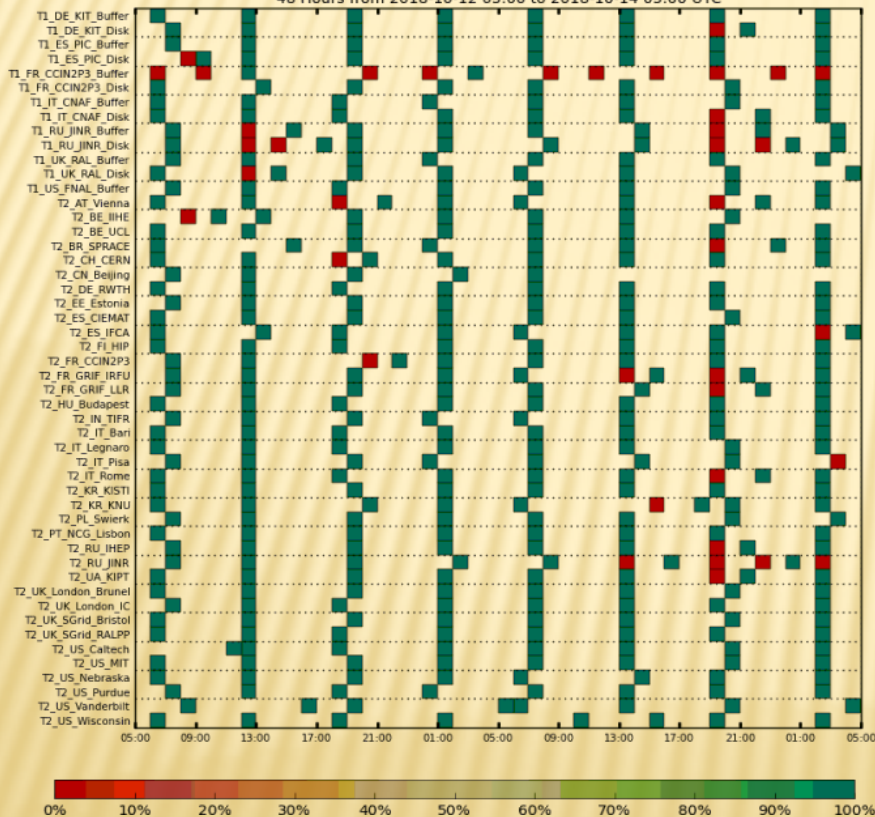
[Info](#) [Activity](#) [Data](#) [Requests](#) [Components](#) [Reports](#) [Next-gen website](#)
[Rate](#) [Rate Plots](#) [Queue Plots](#) [Quality Plots](#) [Routing](#) [Transfer Details](#) [Deletions](#) [Recent Errors](#)

Graph [Quality Map](#) by [Destination](#) filter source [T2_GR_Ioannina](#) destination [\[\]](#)
Period [Last 48 Hours](#) up to [\[\]](#) [Update](#)

DB Instance: **Debug** ==
Ioannis Papadopoulos
Logged in via Certificate

CMS PhEDEx - Transfer Quality

48 Hours from 2018-10-12 05:00 to 2018-10-14 05:00 UTC



PhEDEx – CMS Data Transfers

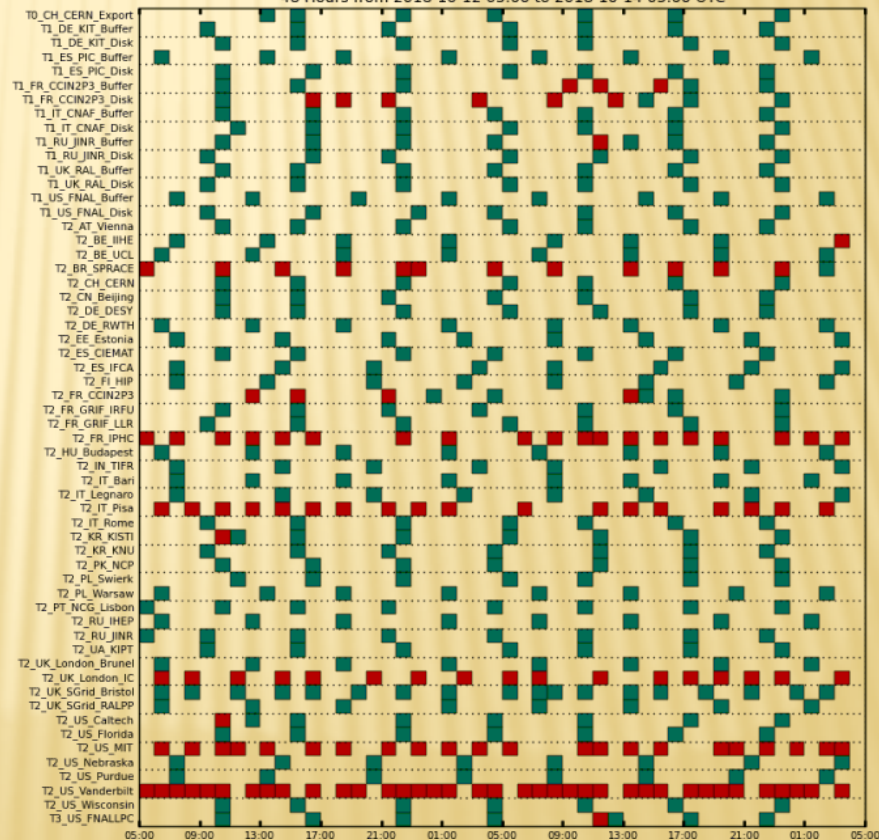
[Info](#) [Activity](#) [Data](#) [Requests](#) [Components](#) [Reports](#) [Next-gen website](#)
[Rate](#) [Rate Plots](#) [Queue Plots](#) [Quality Plots](#) [Routing](#) [Transfer Details](#) [Deletions](#) [Recent Errors](#)

Graph [Quality Map](#) by [Source](#) filter source [\[\]](#) destination [T2_GR_Ioannina](#)
Period [Last 48 Hours](#) up to [\[\]](#) [Update](#)

DB Instance: **Debug** ==
Ioannis Papadopoulos
Logged in via Certificate

CMS PhEDEx - Transfer Quality

48 Hours from 2018-10-12 05:00 to 2018-10-14 05:00 UTC





T2_GR_Ioannina : PhEDEx transfers



PhEDEx - CMS Data Transfers

[Info](#) [Activity](#) [Data](#) [Requests](#) [Components](#) [Reports](#) [Next-gen website](#)

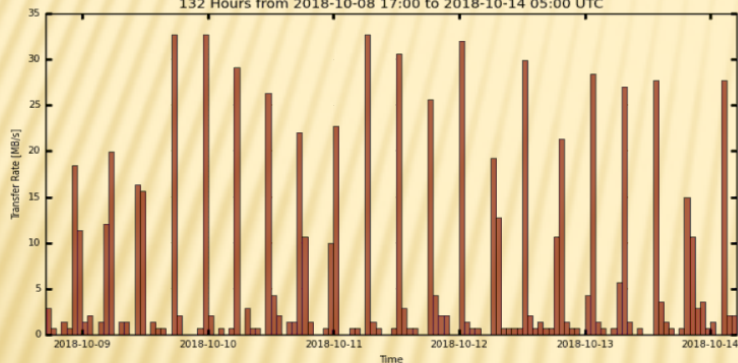
[Rate](#) [Rate Plots](#) [Queue Plots](#) [Quality Plots](#) [Routing](#) [Transfer Details](#) [Deletions](#) [Recent Errors](#)

Graph **Transfer Rate** by **Source** filter source *** GR_Ioannina** destination
Period **Last 132 Hours** up to **Update**

DB Instance: **Debug** **zz**
Ioannis Papadopoulos
Logged in via Certificate

CMS PhEDEx - Transfer Rate

132 Hours from 2018-10-08 17:00 to 2018-10-14 05:00 UTC



T2_GR_Ioannina

Maximum: 32.71 MB/s, Minimum: 0.71 MB/s, Average: 7.50 MB/s, Current: 2.13 MB/s



PhEDEx - CMS Data Transfers

[Info](#) [Activity](#) [Data](#) [Requests](#) [Components](#) [Reports](#) [Next-gen website](#)

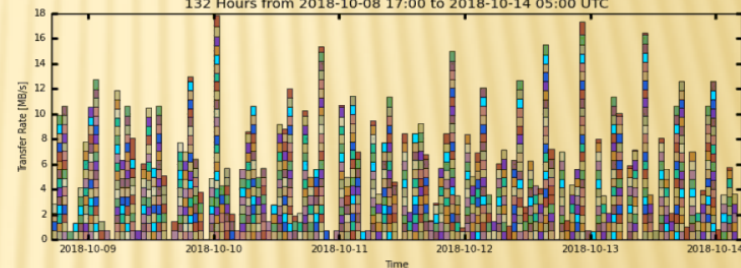
[Rate](#) [Rate Plots](#) [Queue Plots](#) [Quality Plots](#) [Routing](#) [Transfer Details](#) [Deletions](#) [Recent Errors](#)

Graph **Transfer Rate** by **Source** filter source destination *** GR_Ioannina**
Period **Last 132 Hours** up to **Update**

DB Instance: **Debug** **zz**
Ioannis Papadopoulos
Logged in via Certificate

CMS PhEDEx - Transfer Rate

132 Hours from 2018-10-08 17:00 to 2018-10-14 05:00 UTC



Maximum: 17.83 MB/s, Minimum: 0.66 MB/s, Average: 6.32 MB/s, Current: 3.62 MB/s



T2_GR_Ioannina : παρακολούθηση κατάστασης

14 Oct 2018, 07:00:18 EEST

grid01	sda PASSED 26°C			
grid02	sda PASSED 28°C			
grid03	sda PASSED 37°C	sdb PASSED 36°C		
grid04	sda PASSED 43°C			
grid05	sda PASSED 32°C			
grid06	sda FAILED! 27°C	sdb PASSED 27°C	sdc PASSED 25°C	sdd PASSED 25°C
grid07	sda PASSED 38°C	sdb PASSED 45°C	sdc PASSED 35°C	
grid08	sda PASSED 43°C	sdb PASSED 44°C	sdc PASSED 40°C	sdd PASSED 33°C
grid09	sda PASSED 30°C			
grid10	sda PASSED 26°C			
grid11	sda PASSED 28°C			
grid12	sda PASSED 30°C			
grid13	sda PASSED 27°C			
grid14	sda PASSED 28°C			
grid15	sda PASSED 25°C			
grid16	sda PASSED 25°C	sdb PASSED 26°C		
grid17	sda PASSED 31°C			
grid21	sda PASSED 39°C	sdb PASSED 35°C	sdc PASSED 35°C	
grid22	sda PASSED 33°C	sdb PASSED 31°C	sdc PASSED 32°C	
grid23	sda PASSED 36°C	sdb PASSED 30°C	sdc PASSED 32°C	
grid24	sda FAILED! 39°C	sdb PASSED 29°C	sdc PASSED 36°C	sdd PASSED 34°C
grid25	sda PASSED 29°C	sdb PASSED 29°C	sdc PASSED 30°C	
grid26	sda PASSED 25°C	sdb PASSED 26°C		
grid27	sda PASSED 29°C	sdb PASSED 30°C	sdc PASSED 29°C	
grid28	sda PASSED 30°C	sdb PASSED 33°C	sdc PASSED 32°C	sdd PASSED 34°C sde PASSED 33°C
grid29	sda PASSED 27°C	sdb PASSED 31°C		
grid30	sda PASSED 26°C	sdb PASSED 27°C	sdc PASSED 27°C	
grid31	sda PASSED 28°C	sdb PASSED 28°C	sdc PASSED 28°C	
grid32	sda PASSED 27°C	sdb PASSED 29°C		
grid33	sda PASSED 27°C	sdb PASSED 26°C	sdc PASSED 25°C	
grid34	sda PASSED 30°C	sdb PASSED 27°C	sdc PASSED 29°C	
grid35	sda PASSED 28°C	sdb PASSED 30°C		
grid36	sda PASSED 27°C	sdb PASSED 27°C	sdc PASSED 28°C	
grid37	sda PASSED 34°C	sdb PASSED 32°C		
grid38	sda PASSED 28°C	sdb PASSED 28°C		
grid39	sda PASSED 35°C	sdb PASSED 31°C	sdc PASSED 30°C	sdd PASSED 34°C
grid40	sda PASSED 31°C	sdb PASSED 29°C	sdc PASSED 28°C	
pc138	sda PASSED 39°C	sdb PASSED 33°C	sdc PASSED 30°C	
pc139	sda PASSED 30°C			



T2_GR_Ioannina : παρακολούθηση κατάστασης



GGUS - the Helpdesk



Did you know...

Documentation

Registration

My dashboard

Search ticket

Submit ticket

Support staff

My ticket dashboard					
Ticket ID	Creation Date	Short description	Status	Last Change	Remove ticket from dashboard
137247	2018-09-17	Transfers failing from T2_GR_Ioannina	closed	2018-10-02 23:59 (GGUS SYSTEM)	
136786	2018-08-20	T2_GR_Ioannina intermittent SRM VOPut failure	closed	2018-09-07 23:59 (GGUS SYSTEM)	
135820	2018-06-26	Phedex agents are down at T2_GR_Ioannina	closed	2018-07-10 23:59 (GGUS SYSTEM)	
135320	2018-05-25	T2_GR_Ioannina SAM CE failures	closed	2018-06-11 23:59 (GGUS SYSTEM)	
135074	2018-05-11	T2_GR_Ioannina SAM CONDOR-JobSubmit failures	closed	2018-05-28 23:59 (GGUS SYSTEM)	
134824	2018-04-30	cream-ce wont start	verified	2018-05-02 11:04 (Sean Murray)	
134809	2018-04-29	2018 disk pledges for DDM	closed	2018-06-11 23:59 (GGUS SYSTEM)	
134806	2018-04-29	Problem connecting from T2_GR_Ioannina to cmsxrootd2.fnal.gov (IPv6, LHCONE)	closed	2018-05-16 00:01 (OSG-GOC (via Footprints))	
134463	2018-04-09	Missing files at Ioannina?	closed	2018-04-25 23:59 (GGUS SYSTEM)	
134391	2018-04-03	T2_GR_Ioannina xrootd access failures	closed	2018-04-18 23:59 (GGUS SYSTEM)	
134156	2018-03-20	T2_GR_Ioannina xrootd access failures	closed	2018-04-09 23:59 (GGUS SYSTEM)	
134076	2018-03-16	T2_GR_Ioannina transition to multi-core pilots	closed	2018-04-12 23:59 (GGUS SYSTEM)	
133822	2018-03-04	T2_GR_Ioannina transfers issues	closed	2018-03-21 23:59 (GGUS SYSTEM)	
133794	2018-03-02	Singularity deployment at T2_GR_Ioannina	closed	2018-09-27 06:49 (SYSTEM)	
133488	2018-02-14	setup of /store/test/rucio	closed	2018-03-01 23:59 (GGUS SYSTEM)	
132359	2017-12-07	T2_GR_Ioannina SAM xrootd access failures	closed	2018-01-02 23:59 (GGUS SYSTEM)	
132103	2017-11-28	IPv6 deployment at WLCG Tier-2 sites	closed	2018-04-05 23:59 (GGUS SYSTEM)	
131856	2017-11-15	T2_HU_Budapest SAM xrootd access failures	closed	2018-01-03 23:59 (GGUS SYSTEM)	



T2_GR_Ioannina : παρακολούθηση κατάστασης

nodes uptime status

[Hide](#)

14 Oct 2018, 07:16:20 EEST

grid01.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 38 days, 16:12,	1 user,	load average: 0.21, 0.32, 0.28
grid02.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 19:31,	1 user,	load average: 0.07, 0.18, 0.17
grid03.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 18:41,	0 users,	load average: 0.07, 0.11, 0.09
grid04.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:28,	0 users,	load average: 0.03, 0.08, 0.08
grid05.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.00, 0.01, 0.00
grid06.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:28,	0 users,	load average: 0.00, 0.01, 0.00
grid07.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:28,	0 users,	load average: 0.01, 0.04, 0.05
grid08.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:02 up 44 days, 17:29,	0 users,	load average: 0.03, 0.05, 0.06
grid09.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.04, 0.04, 0.00
grid10.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 1.97, 2.03, 1.97
grid11.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.22, 0.13, 0.04
grid12.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 1.11, 1.10, 1.00
grid13.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:02 up 44 days, 17:28,	0 users,	load average: 1.13, 1.62, 1.70
grid14.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.00, 0.00, 0.00
grid15.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.00, 0.00, 0.00
grid16.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:31,	0 users,	load average: 0.06, 0.07, 0.08
grid17.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.07, 0.11, 0.11
grid21.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.13, 0.13, 0.05
grid22.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.00, 0.00, 0.02
grid23.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.11, 0.05, 0.01
grid24.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.14, 0.10, 0.08
grid25.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.02, 0.01, 0.00
grid26.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.34, 0.19, 0.16
grid27.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 12 days, 19:41,	0 users,	load average: 0.00, 0.00, 0.00
grid28.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 29 days, 16:32,	0 users,	load average: 0.67, 0.65, 0.69
grid29.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.04, 0.03, 0.00
grid30.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.02, 0.02, 0.04
grid31.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.11, 0.06, 0.05
grid32.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.00, 0.01, 0.00
grid33.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.06, 0.09, 0.09
grid34.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.06, 0.08, 0.04
grid35.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.00, 0.00, 0.00
grid36.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.11, 0.04, 0.01
grid37.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.08, 0.02, 0.03
grid38.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.10, 0.08, 0.02
grid39.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:30,	0 users,	load average: 0.00, 0.00, 0.00
grid40.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:01 up 44 days, 17:29,	0 users,	load average: 0.08, 0.05, 0.01
pc138.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:02 up 44 days, 17:21,	0 users,	load average: 0.15, 0.09, 0.09
pc139.physics.uoi.gr	2.6.32-754.3.5.el6.x86_64	07:15:02 up 44 days, 17:21,	0 users,	load average: 0.01, 0.07, 0.02



T2_GR_Ioannina : παρακολούθηση κατάστασης

Pakiti - Patching Status System

Navigation: Hosts by CVE | Package | CVE Tags || Hosts | Sites

Results for site **GR-07-UOI-HEPLAB**

Show: **vulnerable** **unpatched** **all** not reporting

Order by: tag | host | **time** | kernel | ops

Select tag: **all**

Security	Other	CVEs	Hostname	OS	Current kernel	Last report	Ops
0	0	0	grid34.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:13 CET	X
0	0	0	grid31.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:13 CET	X
0	0	0	grid13.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:13 CET	X
0	0	0	grid05.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:14 CET	X
0	0	0	grid26.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:14 CET	X
0	0	0	grid22.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid07.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid40.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid15.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid28.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid25.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:15 CET	X
0	0	0	grid32.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid09.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid08.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid04.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid12.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid21.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:17 CET	X
0	0	0	grid33.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:18 CET	X
0	0	0	grid27.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:18 CET	X
0	0	0	grid29.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:19 CET	X
0	0	0	grid10.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:19 CET	X
0	0	0	grid23.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:19 CET	X
0	0	0	grid39.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:20 CET	X
0	0	0	grid14.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:20 CET	X
0	0	0	grid30.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:20 CET	X
0	0	0	grid16.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:20 CET	X
0	0	0	grid11.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:20 CET	X
0	0	0	grid35.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:21 CET	X
0	0	0	grid36.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:21 CET	X
0	0	0	grid24.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:21 CET	X
0	0	0	grid37.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:21 CET	X
0	0	0	grid38.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:22 CET	X
0	0	0	grid03.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:22 CET	X
0	0	0	grid06.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 00:22 CET	X
0	0	0	grid17.physics.uoi.gr	Scientific Linux 6.10	2.6.32-754.6.3.el6.x86_64	31.10.18 20:57 CET	X

Statistics

Tag	Hosts	Clean nodes	Unpatched hosts	Vulnerable hosts	Average # security fixes	# security fixes (worse host)	Dead hosts	Last report
Nagios	1	1	0	0	0	0	0	31 October 2018 20:57 CET
WLCG	34	34	0	0	0	0	0	31 October 2018 20:57 CET

Executed in 29.53 seconds



Pakiti is an EGI service provided by CESNET,
co-funded by EGI.eu <http://egi.eu>



T2_GR_Ioannina : παρακολούθηση κατάστασης

```
[ -bash root@grid01.physics.uoi.gr 33586] /root/bin/pbs-watch ; pbs-status ; showq -b
grid03.physics.uoi.gr      free
grid04.physics.uoi.gr      free
grid05.physics.uoi.gr      offline
grid06.physics.uoi.gr      offline
grid07.physics.uoi.gr      free
grid08.physics.uoi.gr      offline
grid09.physics.uoi.gr      free
grid10.physics.uoi.gr      job-exclusive      R = 2274709 2274623 2274636 2274718 2274612 2274643 2274646      Q = 2274612 2274623 2274636 2274643 2274646 2274709 2274718
grid11.physics.uoi.gr      free
grid12.physics.uoi.gr      job-exclusive      R = 2274638 2274650 2274717 2274652 2274719 2274792      Q = 2274638 2274650 2274652 2274717 2274719 2274792
grid13.physics.uoi.gr      job-exclusive      R = 2274657 2274634 2274690 2274716 2274670 2274714      Q = 2274634 2274657 2274670 2274690 2274714 2274716
grid14.physics.uoi.gr      free
grid15.physics.uoi.gr      free
grid16.physics.uoi.gr      free
grid17.physics.uoi.gr      free
grid21.physics.uoi.gr      job-exclusive      R = 2274658 2274659 2274661 2274663      Q = 2274658 2274659 2274661 2274663
grid22.physics.uoi.gr      free      R = 2274671 2274689      Q = 2274671 2274689
grid23.physics.uoi.gr      free      R = 2274681 2274695 2274765      Q = 2274681 2274695 2274765
grid24.physics.uoi.gr      free      R = 2274739 2274715      Q = 2274715 2274739
grid25.physics.uoi.gr      free      R = 2274793 2274662 2274708      Q = 2274662 2274708 2274793
grid26.physics.uoi.gr      free      R = 2274706      Q = 2274706
grid27.physics.uoi.gr      job-exclusive      R = 2274644 2274647 2274676 2274700      Q = 2274644 2274647 2274676 2274700
grid28.physics.uoi.gr      free      R = 2274672 2274677 2274685      Q = 2274672 2274677 2274685
grid29.physics.uoi.gr      free      R = 2274651 2274653      Q = 2274651 2274653
grid30.physics.uoi.gr      free      R = 2274778 2274779      Q = 2274778 2274779
grid31.physics.uoi.gr      free      R = 2274694 2274713 2274795      Q = 2274694 2274713 2274795
grid32.physics.uoi.gr      free      R = 2273553      Q = 2273553
grid33.physics.uoi.gr      free
grid34.physics.uoi.gr      free      R = 2274679 2274692      Q = 2274679 2274692
grid35.physics.uoi.gr      free      R = 2274771 2274688      Q = 2274688 2274771
grid36.physics.uoi.gr      job-exclusive      R = 2274665 2274666 2274667 2274711      Q = 2274665 2274666 2274667 2274711
grid37.physics.uoi.gr      free      R = 2274693 2274698 2274703      Q = 2274693 2274698 2274703
grid38.physics.uoi.gr      free      R = 2274654 2274655 2274656      Q = 2274654 2274655 2274656
grid39.physics.uoi.gr      free      R = 2274674 2274678 2274684      Q = 2274674 2274678 2274684
grid40.physics.uoi.gr      job-exclusive      R = 2274675 2273542 2274680 2273650      Q = 2273542 2273650 2274675 2274680

Job_ID      Name      User      Time Use S Queue Running on
-----
2273542      cream_622502820      pltcms51      00:00:00 R cms      grid40
2273553      cream_850079737      pltcms51      43:25:32 R cms      grid32
2273650      cream_026656609      pltcms51      00:00:00 R cms      grid40
2274612      cream_985148265      pltcms51      00:01:07 R cms      grid10
2274623      cream_617307549      pltcms51      00:01:07 R cms      grid10
2274634      cream_107902526      pltcms51      00:01:21 R cms      grid13
2274636      cream_528213492      pltcms51      01:03:17 R cms      grid10
2274638      cream_396436149      pltcms51      00:01:20 R cms      grid12
2274643      cream_011139173      pltcms51      00:01:09 R cms      grid10
2274644      cream_307669056      pltcms51      00:01:01 R cms      grid27
2274646      cream_346838585      pltcms51      00:58:58 R cms      grid10
2274647      cream_188561269      pltcms51      01:24:02 R cms      grid27
2274650      cream_387157468      pltcms51      00:01:24 R cms      grid12
2274651      cream_303640169      pltcms51      00:01:05 R cms      grid29
2274652      cream_253391127      pltcms51      00:54:07 R cms      grid12
2274653      cream_996901910      pltcms51      01:25:42 R cms      grid29
```




T2_GR_Ioannina : παρακολούθηση κατάστασης

```
[~bash root@grid02.physics.uoi.gr 30345] pool-stats.sh 4 c
=====
all disks :      free /      total
              25.79T / 153.77T      16.8% free
=====
Legend: Read/Write RDONLY DISABLED
grid03:/data      259.08G 293.41G 88.3% | grid03:/sda3      160.41G 189.74G 84.5% |
grid04:/data      0      0      0.0% | grid04:/sda3      113.69G 124.11G 91.6% |
grid05:/data      5.24G 189.74G 2.8% |
grid06:/data      256.25G 293.41G 87.3% | grid06:/g06d11    1.32T 1.34T 98.0% | grid06:/g06d12    1.31T 1.34T 97.4% | grid06:/sda3      179.92G 189.74G 94.8% |
grid07:/data      6.15G 293.41G 2.1% | grid07:/g07d12    25.07G 1.34T 1.8% | grid07:/sda3      15.23G 747.59G 2.0% |
grid08:/data      254.56G 293.41G 86.8% | grid08:/g08d11    1.33T 1.34T 98.9% | grid08:/g08d12    28.83G 1.34T 2.1% | grid08:/sda3      744.40G 813.22G 91.5% |
grid09:/data      3.08G 135.35G 2.3% |
grid10:/data      3.77G 135.35G 2.8% |
grid11:/data      15.87G 747.59G 2.1% |
grid12:/data      4.23G 189.74G 2.2% |
grid13:/data      16.49G 813.22G 2.0% |
grid14:/data      8.48G 354.78G 2.4% |
grid15:/g15d11    135.29G 135.35G 100.0% |
grid16:/g16d11    6.07G 292.44G 2.1% | grid16:/g16d12    27.62G 1.32T 2.0% |
grid17:/sda3      8.55G 420.77G 2.0% |
grid21:/g21d01    1.62T 1.63T 99.5% | grid21:/g21d02    146.84G 7.16T 2.0% | grid21:/g21d03    1.36T 8.95T 15.2% |
grid22:/g22d01    3.09G 135.35G 2.3% | grid22:/g22d02    37.80G 1.79T 2.1% | grid22:/g22d03    4.28T 8.95T 47.8% |
grid23:/g23d01    8.46G 189.74G 4.5% | grid23:/g23d02    717.41G 7.16T 9.8% | grid23:/g23d03    4.54T 8.95T 50.7% |
grid24:/g24d01    32.96G 1.69T 1.9% | grid24:/g24d02    71.68G 1.79T 3.9% | grid24:/g24d03    1.76T 1.79T 98.3% | grid24:/g24d04    41.07G 1.79T 2.2% |
grid25:/g25d01    33.66G 1.63T 2.0% | grid25:/g25d02    1.75T 1.79T 97.8% | grid25:/g25d03    1.79T 1.79T 99.8% |
grid26:/g26d01    31.34G 1.65T 1.9% | grid26:/g26d03    43.33G 1.79T 2.4% |
grid27:/g27d01    48.47G 1.63T 2.9% | grid27:/g27d02    1.79T 1.79T 100.0% | grid27:/g27d03    36.94G 1.79T 2.0% | grid27:/g27d04    0      0      0.0% |
grid28:/g28d01    12.02G 593.79G 2.0% | grid28:/g28d02    37.54G 1.79T 2.0% | grid28:/g28d03    1.79T 1.79T 100.0% | grid28:/g28d04    36.73G 1.79T 2.0% |
grid28:/g28d05    177.16G 7.16T 2.4% |
grid29:/g29d01    1.00T 1.26T 79.3% | grid29:/g29d02    1.04T 1.26T 82.1% | grid29:/g29d03    1.43T 1.79T 79.8% |
grid30:/g30d01    33.73G 1.63T 2.0% | grid30:/g30d02    977.20G 8.95T 10.7% | grid30:/g30d03    3.50T 8.95T 39.1% |
grid31:/g31d01    48.38G 1.69T 2.8% | grid31:/g31d02    3.70T 8.95T 41.3% | grid31:/g31d03    3.64T 8.95T 40.6% |
grid32:/g32d01    25.95G 1.26T 2.0% | grid32:/g32d02    25.99G 1.26T 2.0% | grid32:/g32d03    37.47G 1.79T 2.0% |
grid33:/g33d01    2.80G 135.35G 2.1% | grid33:/g33d02    37.00G 1.79T 2.0% | grid33:/g33d04    40.41G 1.79T 2.2% |
grid34:/g34d01    45.69G 1.69T 2.6% | grid34:/g34d03    0      0      0.0% | grid34:/g34d04    0      0      0.0% |
grid35:/g35d01    3.29G 135.35G 2.4% | grid35:/g35d02    1.46T 9.02T 16.2% |
grid36:/g36d01    41.92G 1.63T 2.5% | grid36:/g36d02    40.67G 1.79T 2.2% | grid36:/g36d03    1.70T 1.79T 95.0% |
grid37:/g37d01    43.78G 1.69T 2.5% | grid37:/g37d02    34.22G 1.79T 1.9% |
grid38:/g38d01    1.21T 1.26T 95.8% | grid38:/g38d02    1.21T 1.26T 96.0% | grid38:/g38d03    7.10T 7.16T 99.1% |
grid39:/g39d01    37.70G 1.69T 2.2% | grid39:/g39d02    36.76G 1.79T 2.0% | grid39:/g39d03    37.79G 1.79T 2.1% | grid39:/g39d04    37.04G 1.79T 2.0% |
grid40:/g40d01    35.16G 1.63T 2.1% | grid40:/g40d02    38.77G 1.79T 2.1% | grid40:/g40d03    33.92G 1.79T 1.8% |
pc138:/data      125.68G 143.14G 87.8% | pc138:/g02d11    1.15T 1.34T 85.7% | pc138:/g02d12    1.16T 1.34T 86.0% |
```



T2_GR_Ioannina : παρακολούθηση κατάστασης

```
[-bash root@grid01.physics.uoi.gr 33587] grid-uptime.sh
Usage: /root/bin/grid-uptime.sh [<timeout in seconds>] [no_missing]
Using default timeout (10 seconds)

. grid-CONCURRENT-exec-all.sh jobs finished.
grid01.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 38 days, 16:36, 2 users, load average: 0.31, 0.24, 0.26
grid02.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 19:55, 1 user, load average: 0.03, 0.08, 0.15
grid03.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 19:05, 1 user, load average: 0.02, 0.14, 0.21
grid04.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:52, 0 users, load average: 0.62, 0.34, 0.21
grid05.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:53, 0 users, load average: 0.04, 0.27, 0.20
grid06.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:52, 0 users, load average: 0.06, 0.27, 0.16
grid07.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:52, 0 users, load average: 0.10, 0.20, 0.16
grid08.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:53, 0 users, load average: 0.02, 0.21, 0.16
grid09.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:53, 0 users, load average: 0.03, 0.17, 0.10
grid10.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:53, 0 users, load average: 1.08, 1.94, 2.15
grid11.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 0.11, 0.20, 0.16
grid12.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 3.08, 2.42, 1.62
grid13.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 0.19, 0.93, 1.38
grid14.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 0.04, 0.13, 0.08
grid15.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 0.05, 0.20, 0.13
grid16.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:56, 0 users, load average: 0.08, 0.38, 0.25
grid17.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:53, 0 users, load average: 0.17, 0.36, 0.26
grid21.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.10, 0.41, 0.29
grid22.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.07, 0.18, 0.14
grid23.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.09, 0.31, 0.21
grid24.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.08, 0.24, 0.18
grid25.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.12, 0.56, 0.32
grid26.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.14, 0.55, 0.41
grid27.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 12 days, 20:05, 0 users, load average: 0.19, 0.33, 0.19
grid28.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 29 days, 16:56, 0 users, load average: 0.01, 0.42, 0.67
grid29.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.09, 0.20, 0.11
grid30.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.10, 0.29, 0.17
grid31.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.02, 0.24, 0.17
grid32.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.08, 0.22, 0.16
grid33.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.01, 0.20, 0.17
grid34.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.06, 0.20, 0.16
grid35.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.08, 0.24, 0.15
grid36.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:12 up 44 days, 17:54, 0 users, load average: 0.06, 0.38, 0.26
grid37.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.01, 0.17, 0.11
grid38.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.11, 0.16, 0.09
grid39.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.02, 0.21, 0.15
grid40.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:54, 0 users, load average: 0.03, 0.27, 0.16
pc138.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:45, 0 users, load average: 0.00, 0.04, 0.07
pc139.physics.uoi.gr 2.6.32-754.3.5.el6.x86_64 07:39:13 up 44 days, 17:46, 0 users, load average: 0.00, 0.13, 0.18
```

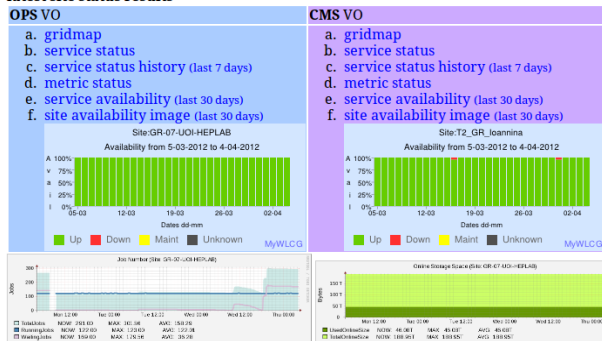



T2_GR_Ioannina : παρακολούθηση κατάστασης

The **GR-07-UOI-HEPLAB** GRID site is named by CMS as **T2_GR_Ioannina**. You may find below some useful links about the status of the site and the datasets that are stored on the SE of the site.

WARNING: A valid grid certificate, installed on your web browser, is necessary for some of the links to be viewed.

1. general information
2. current status (GStat 2.0)
3. latest site status results



- #### 4. CMS Grid sites: monitoring results

- a. T2_GR_Ioannina site

05 Apr 2012, 07:13:32 EEST						grid01.physics.uoi.gr / CREAM-CE		grid02.physics.uoi.gr / SRMv2		
org.cms WN-nc	org.cms WN-basic	org.cms WN-swinst	org.cms WN-squid	org.cms CREAM-3sh50mrt	org.cms WN-analysis	org.cms WN-frontier	org.cms SRM-V06t	org.cms SRM-PFWF06t06t	org.cms SRM-V0Pu	

- b. all Tier-2 sites
- c. Site Availability Ranking Plot (last 30 days)
- d. Site Reliability Ranking Plot (last 30 days)
- e. Service Availability Plot (last 30 days)

- ## 5. CMSSW releases

- a. installed at T2_GR_Ioannina

- Show

- b. announced
- c. deprecated

- ## 6. PhEDEx

- a. **DAS web interface**

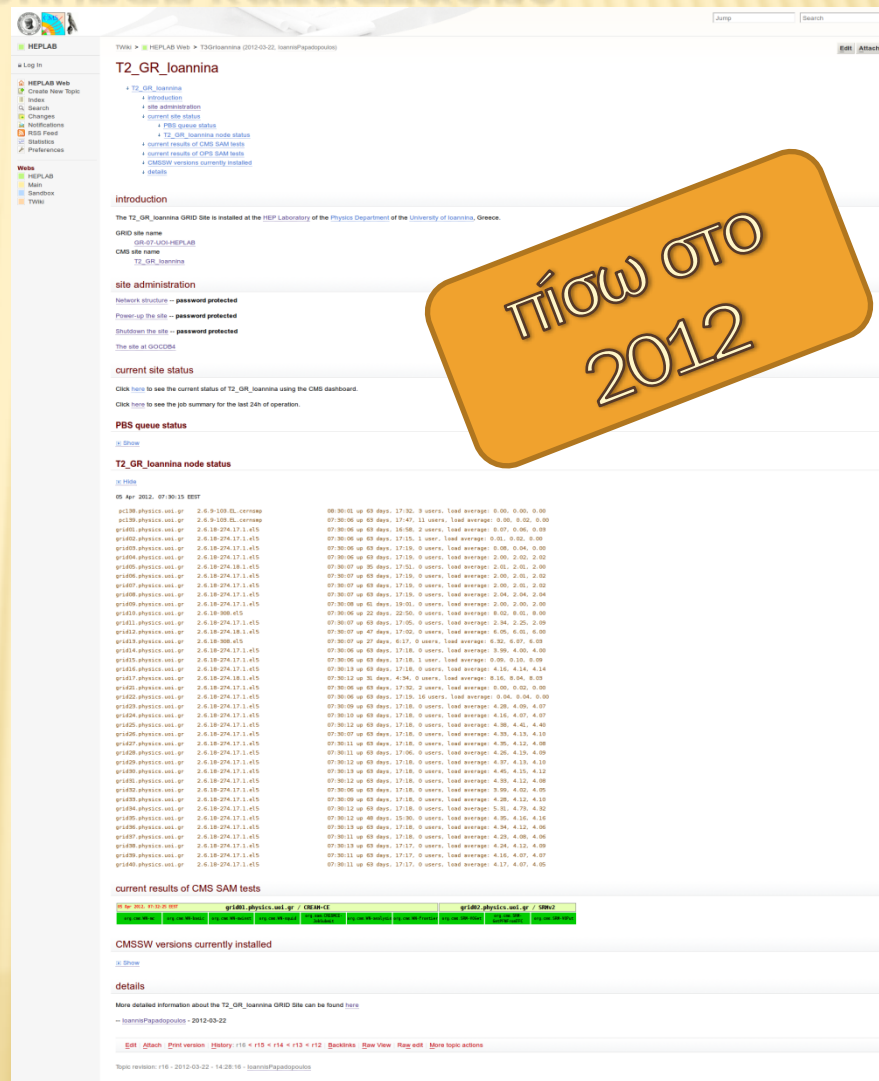
- b. Interface to search DBS for the blocks that contain specific runs of specific datasets (*it takes some time...*)

runs:
 dataset:
 site:
 DBS instance:

- c. Data stored on the Storage Element (SE - grid02.physics.uoi.gr) of T2_GR_Ioannina
- d. Data transfer routing for GR_Ioannina
- e. Data deletion requests for GR_Ioannina
- f. Data verification for GR_Ioannina
- g. PhEDEx agents status

Prod instance	Debug instance
i. Rate	i. Rate
ii. Rate Plot	ii. Rate Plot
iii. Link Status	iii. Link Status

Last updated on 05 Apr 2012 by Ioannis Papadopoulos



Copyright © by the contributing authors. All material on this collaboration platform is the property of the contributing authors. Ideas, requests, problems regarding TWR? Send feedback