



Migration to the new WLCG Transfer Dashboards

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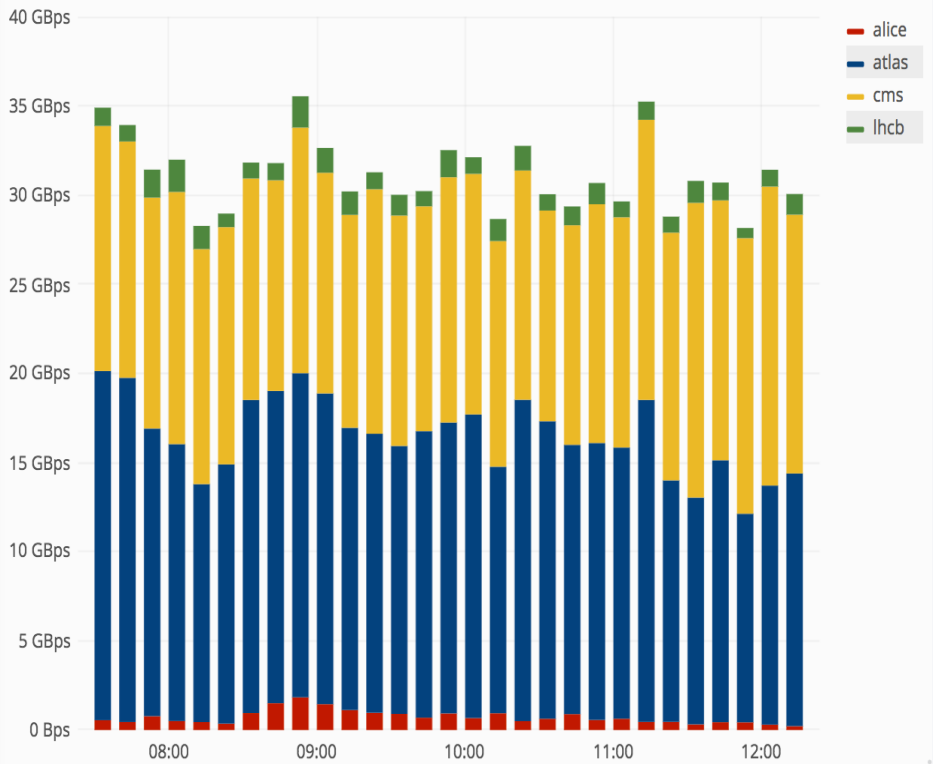
New Monitoring Dashboards

- Part of the MONIT migration
 - Focus here is the migration of the transfer dashboards:
 - WLCG (dashb-wlcg-transfers.cern.ch)
 - FTS (dashb-fts-transfers.cern.ch)
 - XRootD (dashb-wdt-xrootd.cern.ch)
- Similar features and user experience as old tools
- Same data sources and statistics
- Modern technology stack (e.g. Grafana, Kafka, Spark, etc.)
- More monitoring possibilities
 - search, explore, analytics

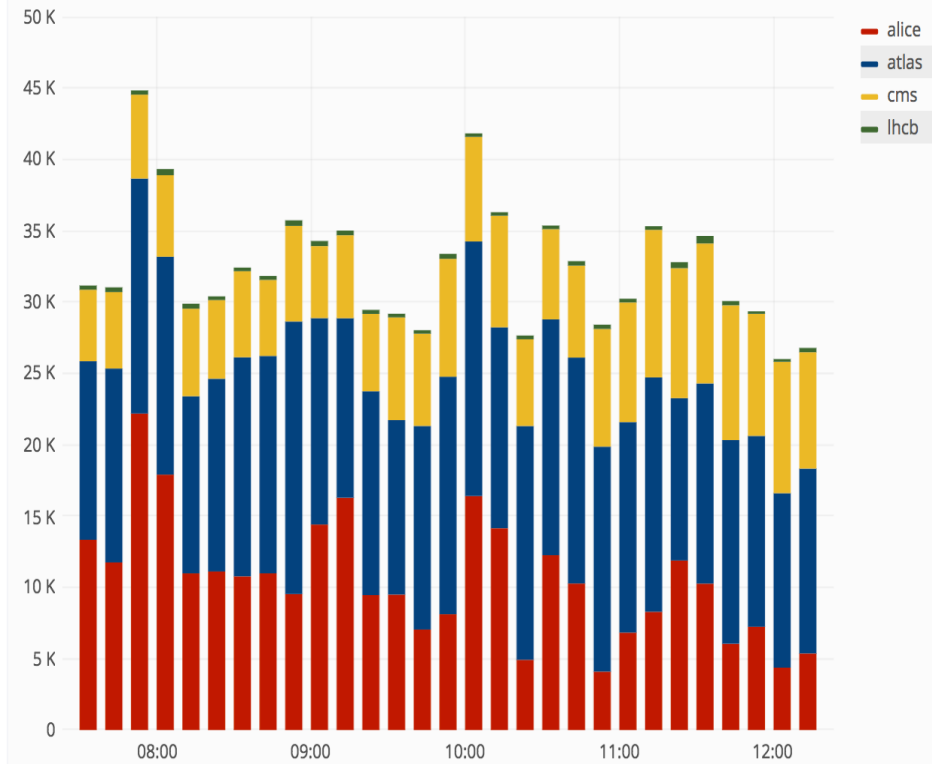


🔗 WLCG Transfers (5 Years)

Transfer Throughput



Transfers Finished





Group By

technology

VO

All

Source Country

All

Dest Country

All

Source Site

All

Dest Site

All

Technology

All

Bin

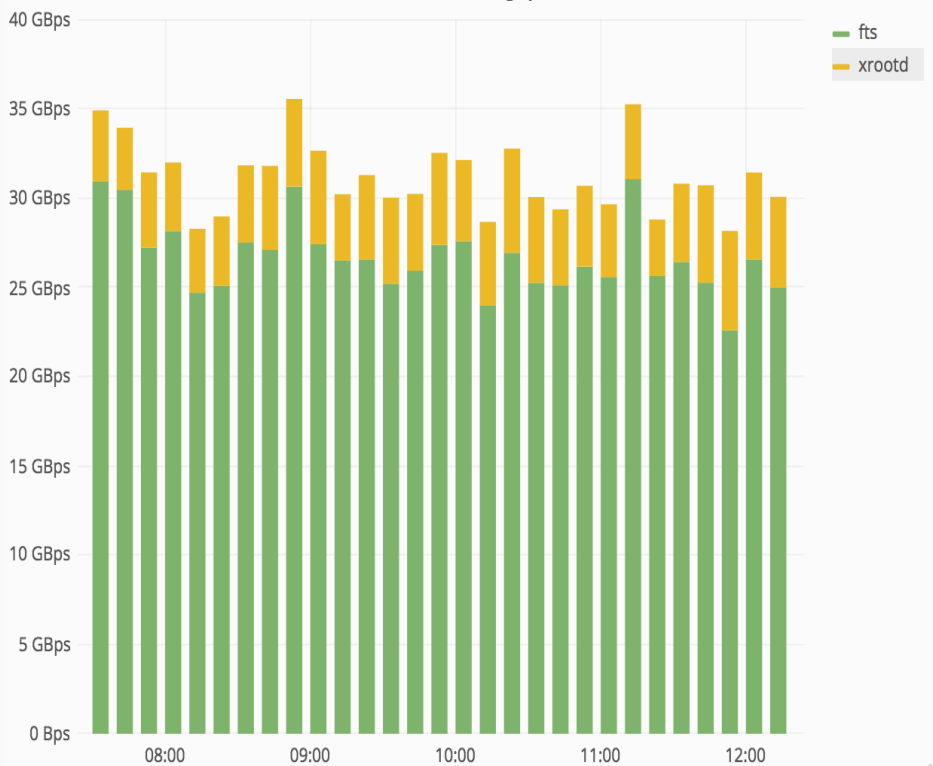
auto

Filters

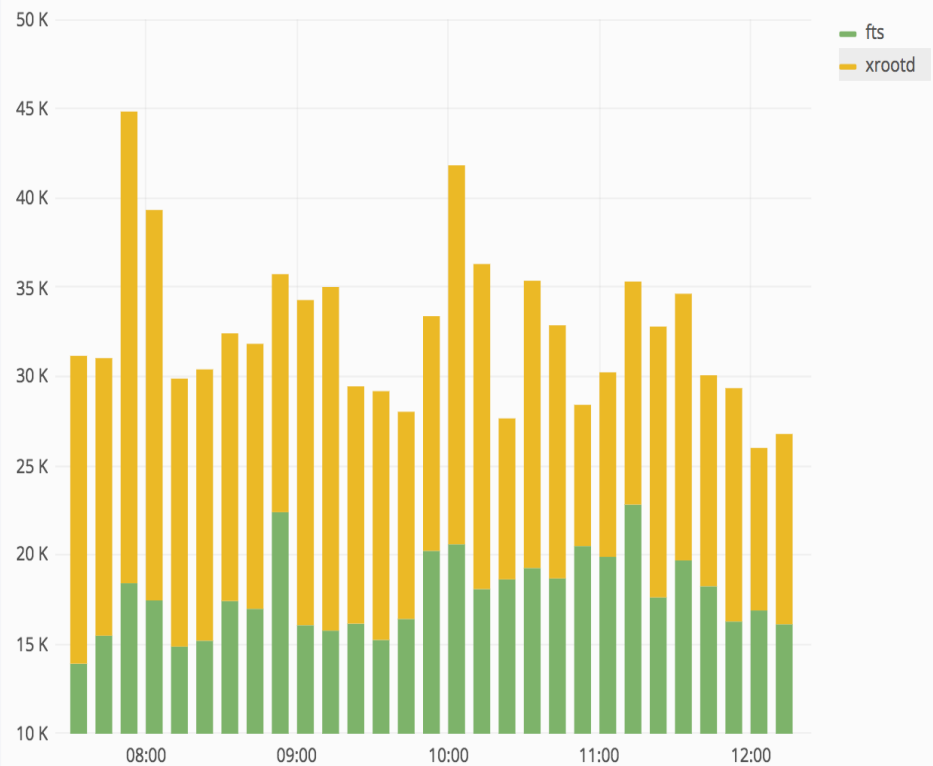


WLCG Transfers (5 Years)

Transfer Throughput



Transfers Finished



Main Features

- Dropdown selection menus / Dynamic Group-By
- Custom Filters for drilldown / Time Zooming on plot
- Plot embeddable in HTML (iframe)
- Plot export in PNG
- Plot data export in CSV
- Different views & Data retentions
 - 30 days (10 minutes resolution)
 - Forever (5 years) (≥ 1 hour resolution)
- Historical data has been imported from old dashboards

Main (New) Features

- User control
 - New dashboards can be created & customized (with our help) by users for specific monitoring use cases and views
- Mixed dashboards
 - Data from multiples sources (e.g. transfers, jobs, network) can be easily mixed in the same plot or dashboard
- Plot Alarming
 - Users can create a threshold-based rule on a plot via the Grafana UI to receive a mail/notification in case of issue
- Access to monitoring data
 - Data can be accessed by users for debug, explore, analytics, etc.

Migration Plan

- September 2017 (next week):
 - Add URL redirect from old base domain to new
 - With "click to stay" option
 - Switch services based on old tools to the new ones
 - WLCG Google Earth, WLCG home page
- November 2017:
 - Remove old URL
 - Keep old dashboards still available on different URL

References

- MONIT portal for new dashboards and services
 - <http://monit.cern.ch>
- Docs:
 - <https://cern.ch/monitdocs>
- Feedback & Support:
 - <https://cern.ch/monit-support>

Dashboards

WLCG

WLCG TRANSFERS
30 DAYS

T0 - T1
TRANSFERS

FTS
TRANSFERS

LHCOPN
OVERVIEW

WLCG TRANSFERS
5 YEARS

T0 - T1 - T2
TRANSFERS

XROOTD
TRANSFERS

LHCOPN
DETAILED

ATLAS

CMS

Data Centre

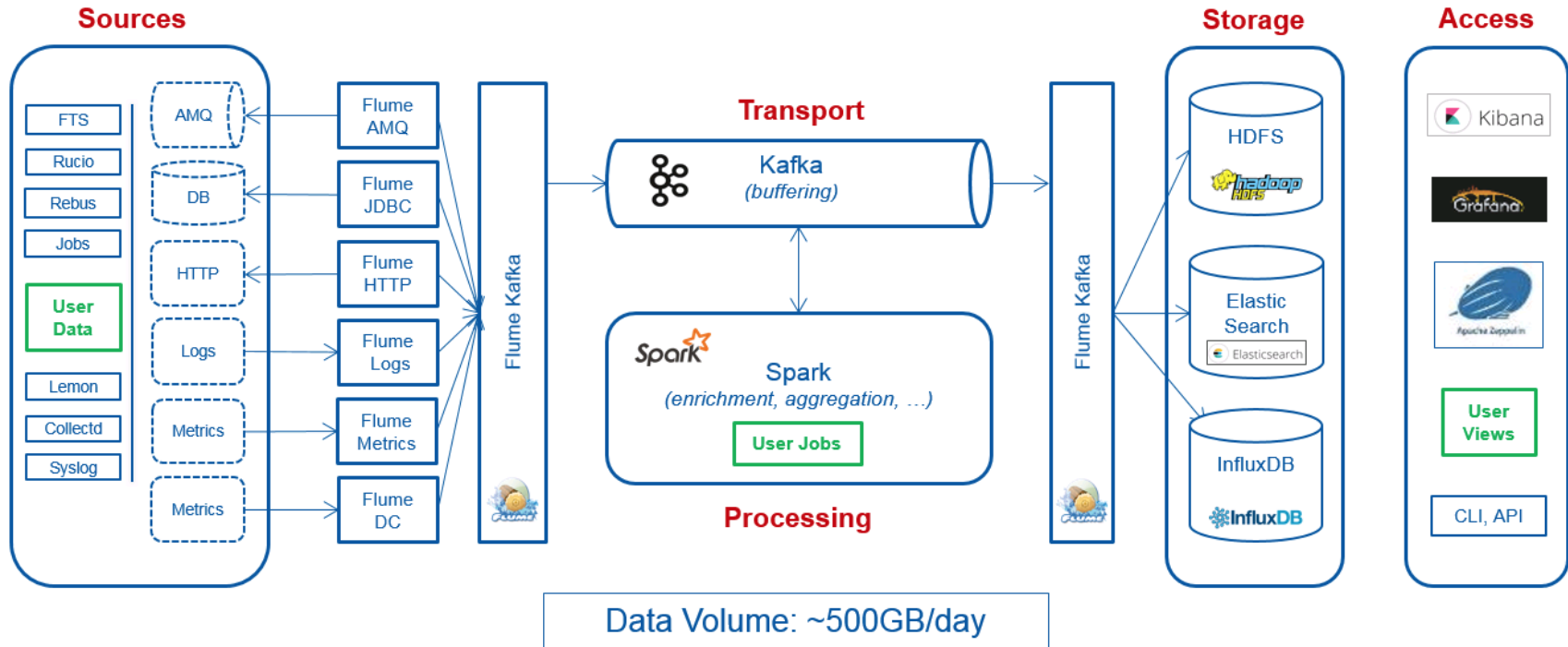
[More WLCG Dashboards](#)

[Data Discovery](#)

[More Data Centre Dashboards](#)



MONIT Architecture: quick recap





Efficiency																								
	Australia	Austria	Belgium	Brazil	Canada	China	Czech Republic	Estonia	Finland	France	Germany	Greece	Hungary	India	Israel	Italy	Japan	Latin America	Netherlands	Nordic	Poland	Portugal		
	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Australia	-	-	97%	100%	99%	99%	98%	-	100%	78%	99%	100%	99%	85%	100%	-	90%	100%	100%	100%	-	100%		
Austria	-	0%	0%	63%	0%	32%	16%	59%	0%	45%	0%	0%	0%	-	0%	100%	0%	57%	0%	0%	0%	48%		
Belgium	-	-	-	98%	-	99%	98%	78%	-	88%	-	-	-	-	100%	-	61%	-	-	-	-	99%		
Brazil	-	-	-	100%	-	99%	79%	100%	-	77%	-	-	-	-	100%	-	72%	-	-	-	-	100%		
Canada	-	92%	98%	100%	99%	99%	98%	-	100%	86%	99%	100%	99%	96%	100%	100%	91%	99%	100%	100%	100%	100%		
China	-	100%	100%	-	100%	99%	71%	90%	100%	92%	94%	100%	100%	89%	100%	100%	82%	90%	100%	99%	0%	98%		
Czech Republic	-	100%	98%	100%	-	97%	96%	-	99%	87%	94%	94%	93%	94%	100%	100%	79%	89%	100%	95%	-	97%		
Estonia	-	-	-	36%	-	54%	46%	54%	-	49%	-	-	-	-	-	56%	-	47%	-	-	-	44%		
Finland	-	-	-	71%	-	79%	92%	60%	-	81%	-	-	-	-	90%	-	73%	-	-	-	-	97%		
France	-	95%	95%	97%	97%	91%	93%	79%	97%	79%	95%	98%	75%	35%	93%	98%	84%	72%	97%	93%	41%	94%		
Germany	-	96%	99%	100%	98%	97%	96%	100%	99%	92%	96%	99%	98%	88%	98%	100%	87%	94%	99%	98%	29%	98%		
Greece	-	100%	97%	100%	96%	95%	96%	-	100%	93%	99%	100%	100%	-	100%	100%	64%	97%	100%	99%	-	94%		
Hungary	-	-	-	100%	-	100%	82%	100%	-	94%	-	-	-	-	100%	-	85%	-	-	-	-	99%		
India	-	-	-	100%	-	98%	100%	82%	-	97%	-	-	-	-	90%	-	100%	-	-	-	-	100%		
Israel	-	100%	100%	100%	99%	99%	96%	-	100%	97%	99%	100%	99%	93%	100%	100%	70%	96%	100%	100%	-	100%		
Italy	-	72%	78%	56%	76%	83%	74%	34%	84%	72%	84%	86%	81%	83%	72%	78%	87%	71%	58%	88%	81%	71%		
Japan	-	100%	97%	99%	95%	99%	98%	-	100%	71%	100%	93%	96%	75%	98%	100%	93%	97%	100%	99%	-	99%		
Latin America	-	100%	99%	100%	100%	100%	98%	-	100%	66%	100%	-	99%	89%	100%	-	86%	99%	100%	100%	-	100%		
Netherlands	-	100%	95%	100%	99%	98%	98%	-	100%	97%	99%	98%	99%	93%	100%	100%	92%	99%	100%	100%	-	100%		
Nordic	-	-	-	-	-	100%	100%	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-		



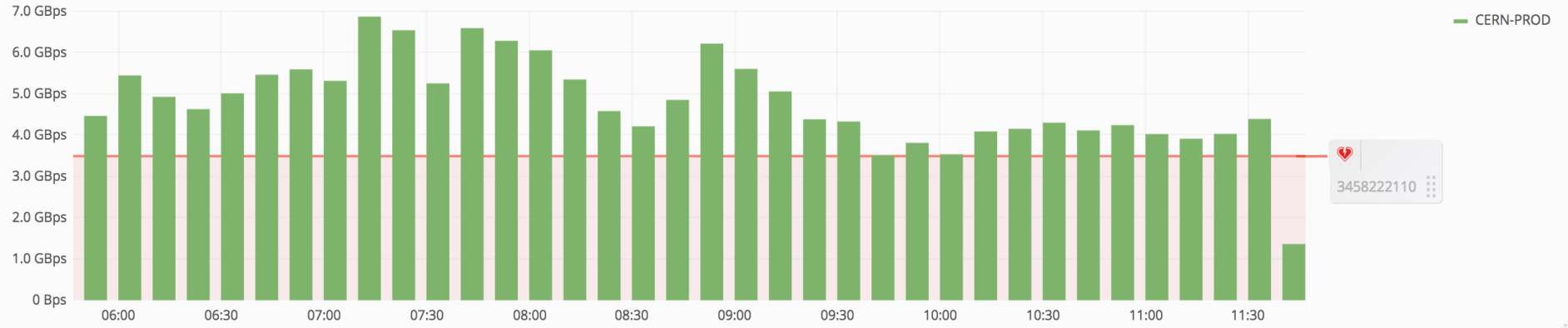


Group By: src_site | VO: All | Source Country: All | Dest Country: All | Source Site: All | Dest Site: All | Technology: All | Bin: auto

Filters: src_site = CERN-PROD

WLCG Transfers (5 Years)

Transfer Throughput



Alert Config: 3458222110

Graph

General | Metrics | Axes | Legend | Display | Alert | Time range

Alert Config

Alert Config

Notifications (0)

Name: Transfer Throughput alert | Evaluate every: 60s

State history

Delete

Conditions

WHEN avg () OF query (A, 5m, now) IS BELOW 3458222110

LHCOPN/WLCG traffic comparison

