

FTS Operations

Maria Arsuaga Rios

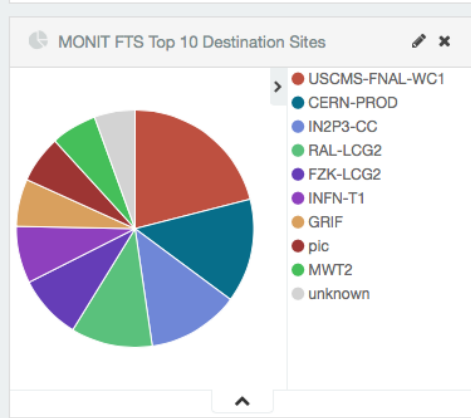
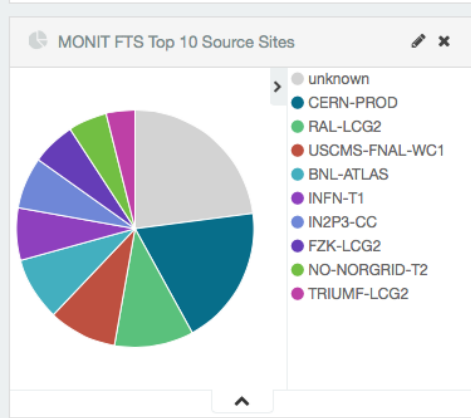
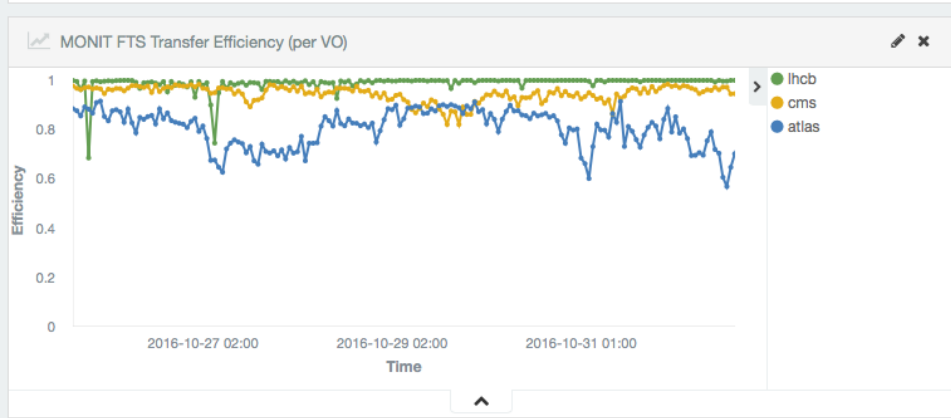
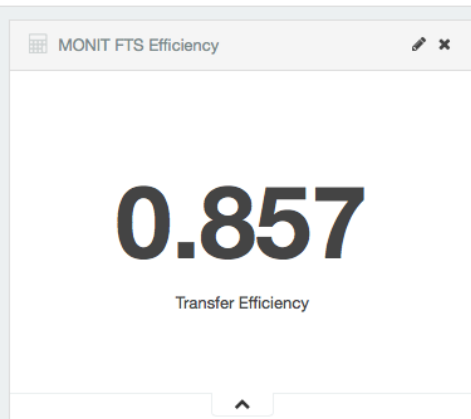
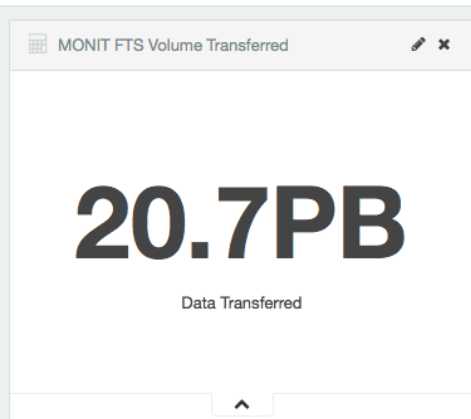
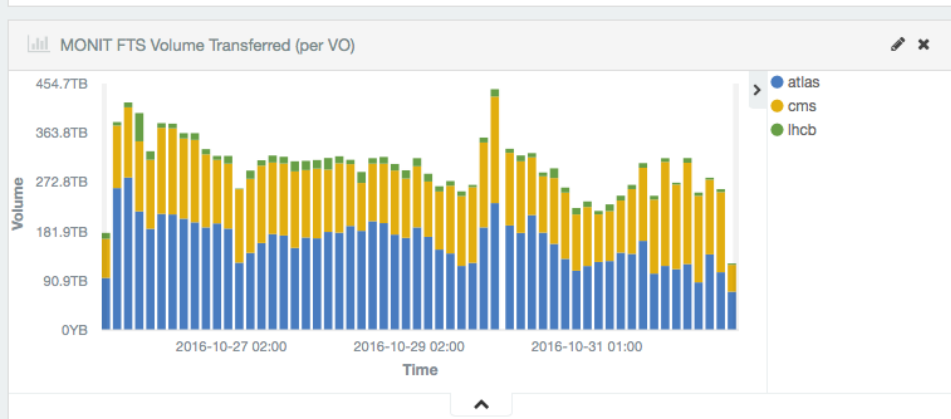
WLCG Operations: 03/11/2016



FTS Operations

- FTS Status
- FTS Steering Role
- FTS Release Cross Check @ CERN
- FTS Configuration Monitoring
 - Motivation
 - Tasks and Status
 - Next Steps
 - Demo

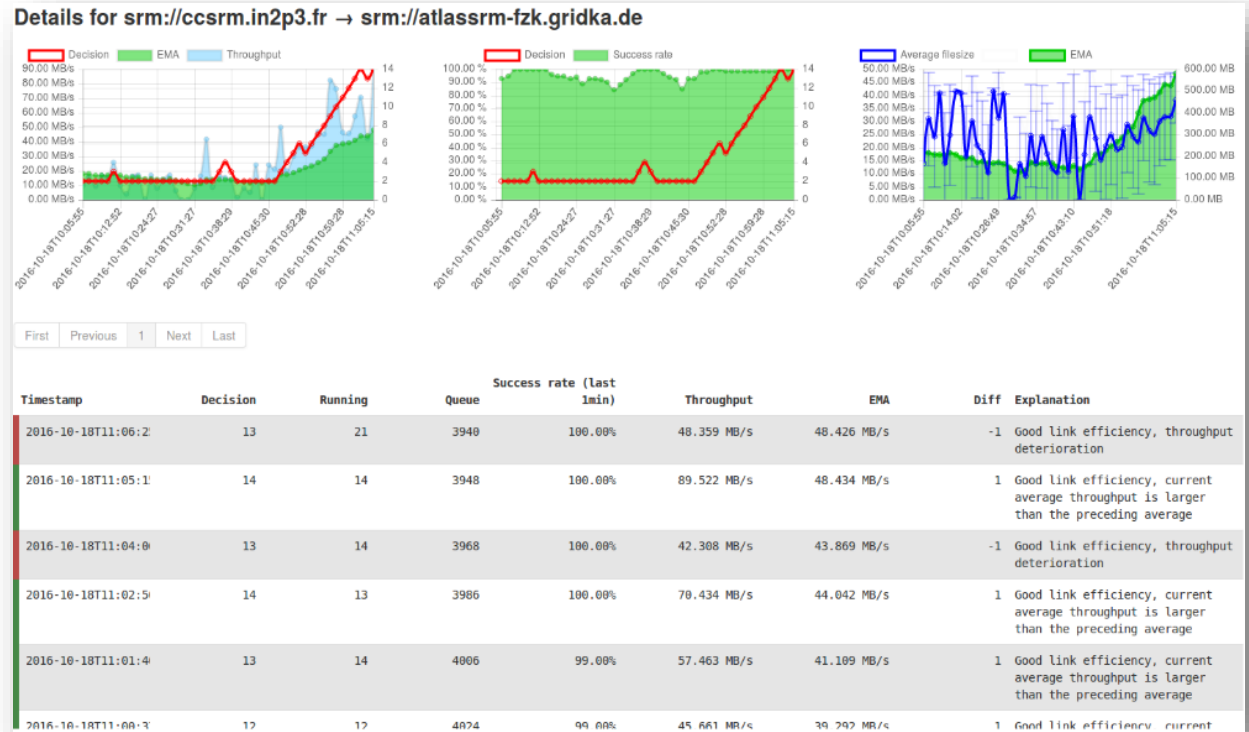
FTS Status ([last 7 days](#))



FTS Status

- FTS 3.5

- [Release notes](#)
- [Upgrade guide](#)
- [Optimizer](#)
(actives range)
- IPv6 transfers monitoring



FTS Servers	Current Version
BNL	3.4.7
CERN	3.5.5
FNAL	3.2.20
RAL	3.4.7

FTS @ CERN: Migration to  **CentOS 7**

FTS Status

- Main plans: FTS 3.6
 - User DN send setting (opt-in) per VO
 - Create a ticket in Jira: FTS Configurations
 - [SOAP shutdown](#) (Only CMS is using SOAP – Migration to REST on going)

Create Issue Configure Fields

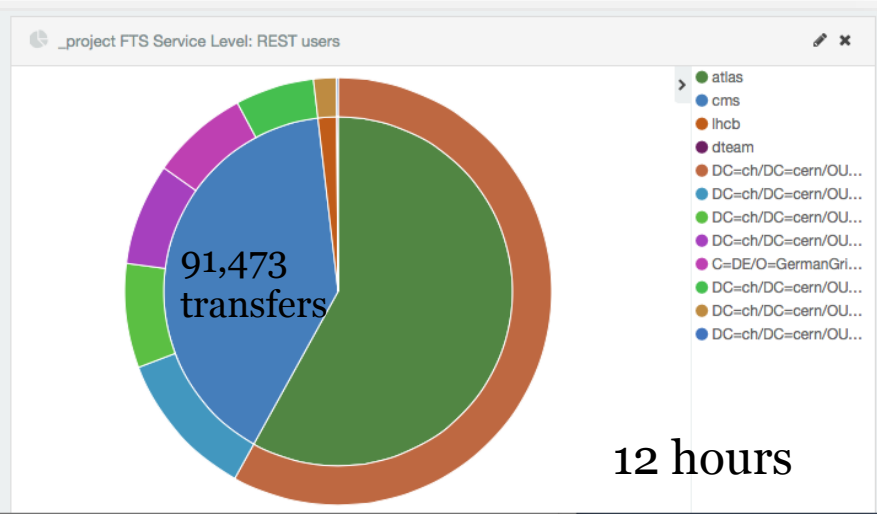
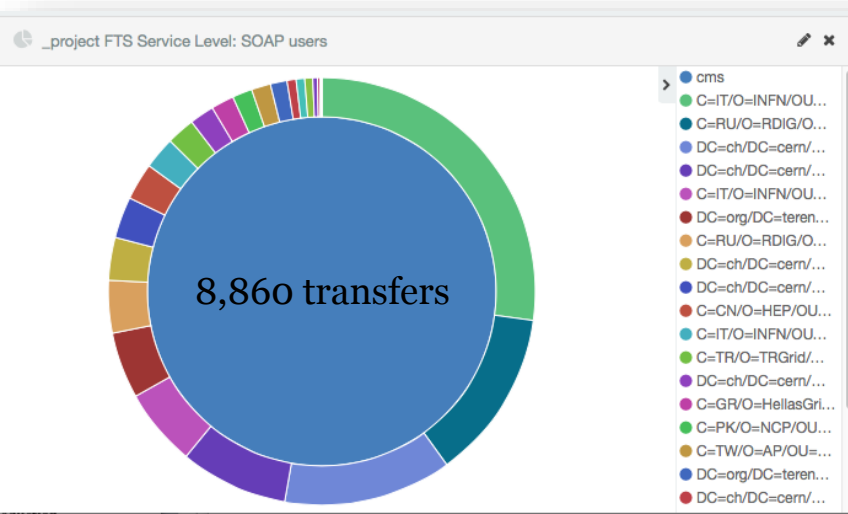
Project FTS Configurations (FTSCFG)

Issue Type Task

Reporter Maria Arsuaga Rios

Summary

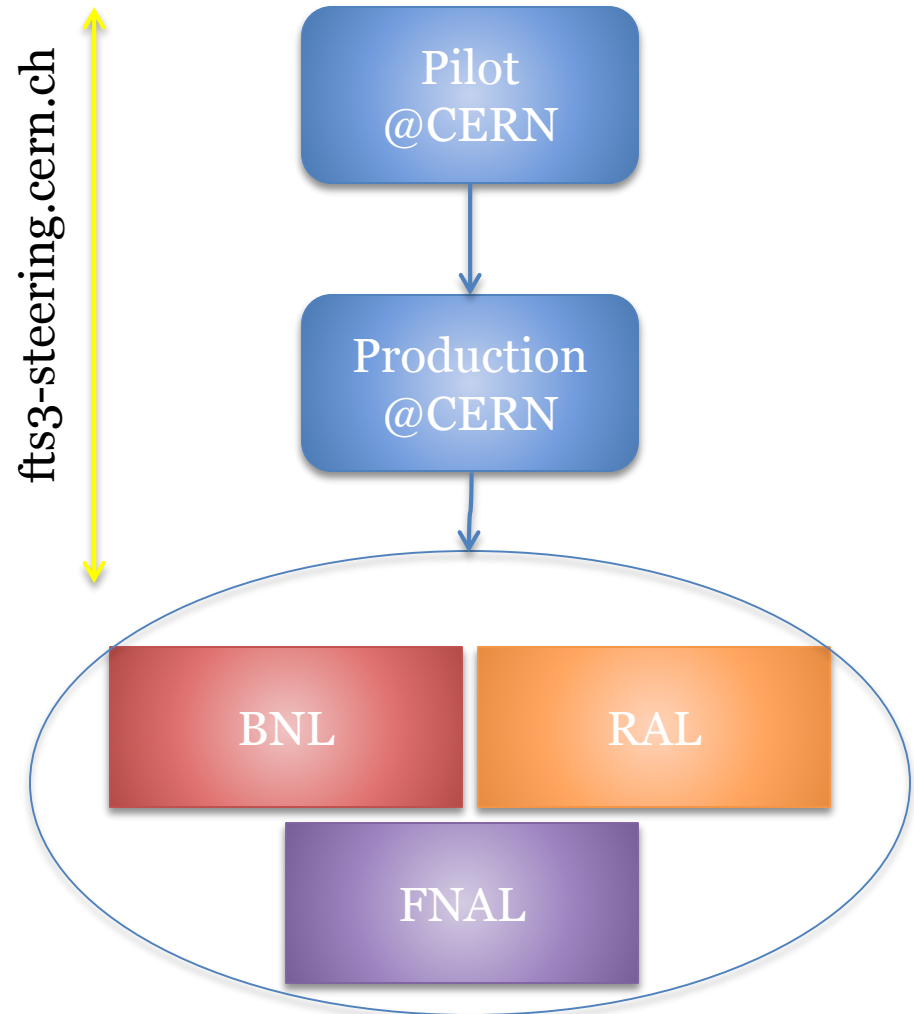
Priority Minor



FTS Steering role

- **Stakeholders contact** during the whole release process
- **FTS steering meetings**
 - Requested by experiments/sites/developers
- **Anyone can subscribe** *fts3-steering.cern.ch*

FTS Release Process



FTS Release cross check @ CERN

- Patch releases with simple bugfix may go straight to production.
- New functionalities & big set of bugfixes, they have to follow the [cross check guide](#).
- **Deployment**
 - The **candidate release** have to be running in the **pilot** enough time.
 - Must be **one new node deployed** in the pilot **from scratch** with the new version.
- **Validation**
 - **Probes** run against the **pilot** are **green and stable** ([Jenkins](#)).
 - Errors are acceptable if they are properly understood
 - If the error is internal -> ticket must exist
 - **Functional tests** pass.
 - **Stress tests** pass.

FTS Release cross check @ CERN

- **Monitoring**

- All nodes and services are properly monitored ([FTS Service Level](#))
- There are no critical log entries.
- There are no error log entries or they are understood.
 - Ticket should be created.
- DB load is acceptable ([DBOnDemand](#)).
- Transfers are published ([MONIT-FTS-Overview](#))

- **VO Agreement**

- ATLAS, CMS and LHCb have run **transfers on the pilot** ([Pilot-VO-Information](#)).
- ATLAS, CMS and LHCb give **green light**.

- **Final Validation**

- The release notes are up to date.
- The release notes are published in fts3-service.web.cern.ch.
- Production qa nodes should be upgraded ~24h before the rest of the cluster (if possible).
- CERN-PROD is upgraded first
 - Fts3-steering is notified to upgrade the rest of FTS Servers

FTS Configuration Monitoring

- Main goal: Identify overlapping FTS configurations between VOs.

FTS Servers	ATLAS	CMS	LHCb
BNL	X		
CERN	X	X	X
FNAL		X	
RAL	X	X	

- Objectives:
 - Show ftsmon info views from different FTS Servers in one place.
 - Show hardcoded default values.
 - Show priority information between FTS configurations.
 - Show Site transfer information correlated with the FTS configurations (actives info).
 - Use JIRA to have record of changes: FTS Configurations.

Tasks and Status

- Retrieve info from main FTS Servers. ✓
 - Ask permissions for dteam and lcgadmin Role. (BNL, FNAL) ✗
 - Implement a program that read and publish this information to monitoring. ✓
 - Transform json formats, structs and metadata naming conventions to make it compatible with monitoring requirements. ✓
 - Publish automatically this information in monitoring (Jenkins). ✓
- Ask monitoring to enrich the data as they do for the FTS transfers in order to be able to correlate the data. (Waiting for monitoring) ✗
- Create visualizations (Second Iteration). ✓
- Ask feedback from experiments. ✓

Next steps

- Retrieve configuration
 - BNL -> dteam is not registered (waiting)
 - FNAL-> We need the FNAL upgrade ASAP (waiting for his upgrade/plan)
- Monitoring enrichment (waiting for monitoring team)
 - Discovered that monitoring is only consuming SRMv2 flavors
 - GridFTP and XRootD are ignored (waiting for merge)
 - Monitoring reads VOFeed (agis, dirac, etc..) to perform the enrichment.
 - VOFeed responsables need to update the VOFeed if they want to see the information in the official monitoring for FTS.
- Site transfer/settings visualization to target the two use cases from ATLAS feedback. (Third iteration)

Demo

- FTS Configurations:

<https://monit.cern.ch/app/kibana#/dashboard/project-FTS-Servers-Configuration>

- Overview FTS Configuration: All ftsmon config in one place + default values + documented priority and meanings + filtering per FTS Server.

<https://monit.cern.ch/app/kibana#/dashboard/project-FTS-Servers-Configuration-Overview>

- Specific configuration for ATLAS:

<https://monit.cern.ch/app/kibana#/dashboard/project-FTS-Config-ATLAS>