Rucio TPC Update

Thomas Beermann
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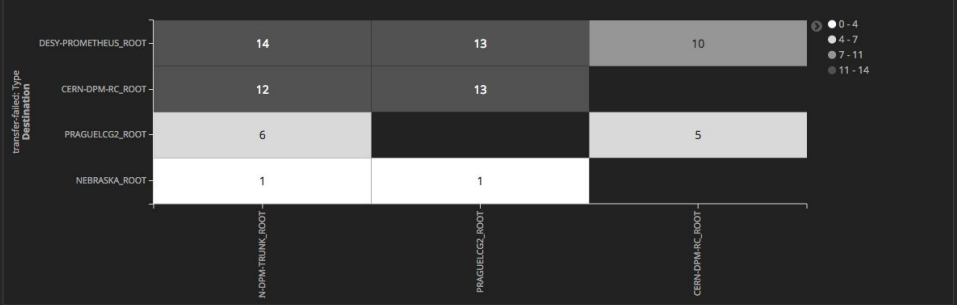
Instance Overview

- CERN Openstack Kubernetes cluster with 1 master / 5 nodes
- Servers:
  - 1 normal server
  - 1 authentication server (currently only with userpass)
- Daemons:
  - 1 pod per daemon type / 12 pods in total
- Monitoring:
  - Filebeat/Logstash to collect daemon & server logs and send them to Elasticsearch
  - Transfer events (queued, submitted, failed, success) also send to Elasticsearch
- Server address: https://rucio-doma.cern.ch (only from inside CERN)

Updates

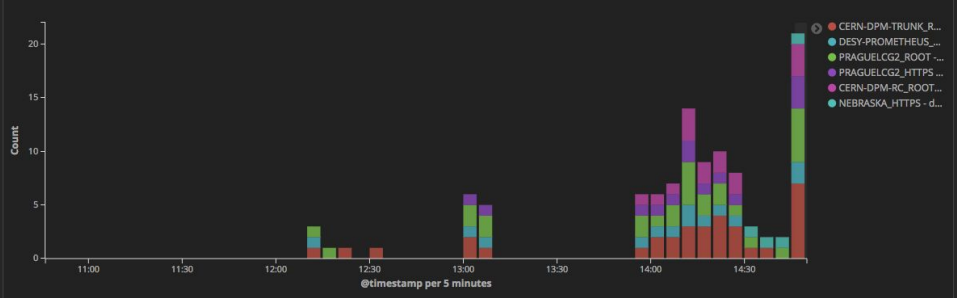
- Instance is now working with a couple of endpoints:
  - Account / identities have been configured (currently only root account)
  - RSEs have been configured (currently CERN-DPM-RC/TRUNK, DESY, PRAGUE, NEBRASKA)
  - Automatic proxy renewal and delegation to FTS has been set up
  - Files can be registered and uploaded to the RSEs
  - Rules can be created which will then submit the jobs to FTS
  - Old files will be removed from the RSEs when they expire
- Transfer monitoring is available on Kibana (contact me to get username/password)

Rucio DOMA - Heatmap (Root)

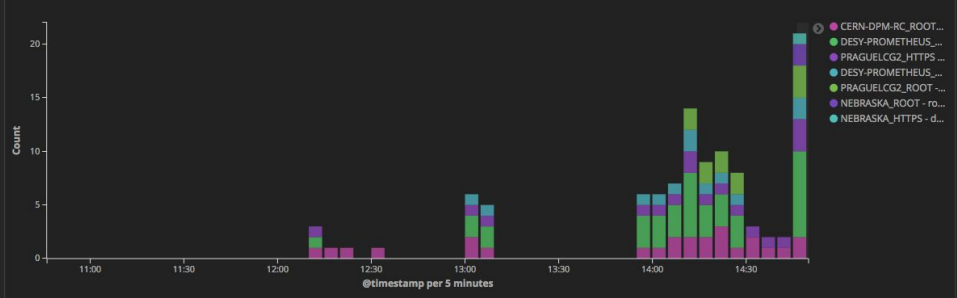


Rucio DOMA - Heatmap (DAVS)

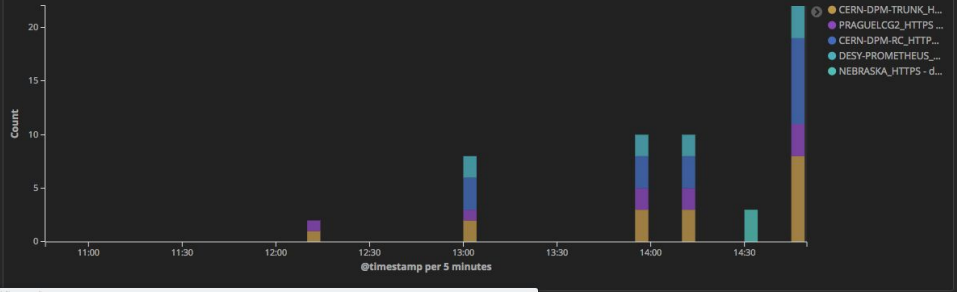
Rucio DOMA - Failed Transfers per Source



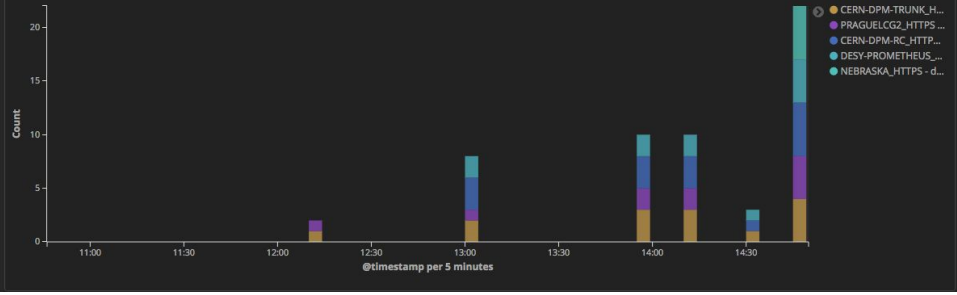
Rucio DOMA - Failed Transfers per Destination



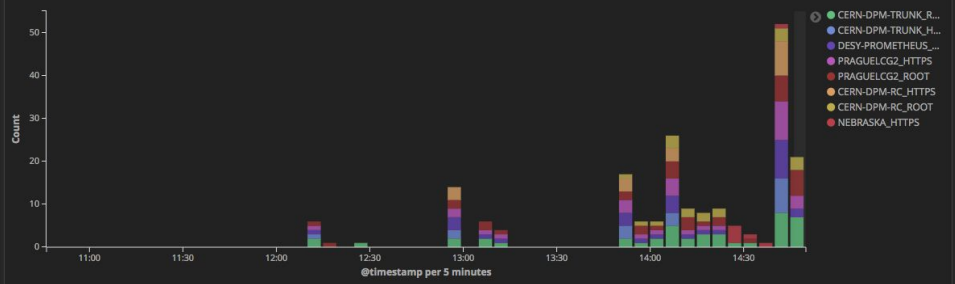
Rucio DOMA - Successful Transfers per Source



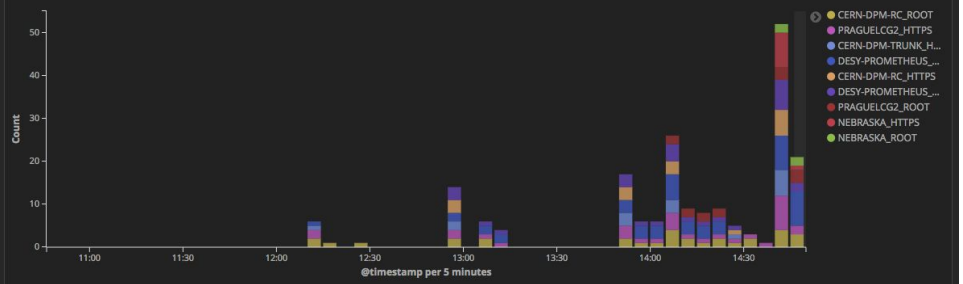
Rucio DOMA - Successful Transfers per Destination



Rucio DOMA - Submitted Transfers per Source



Rucio DOMA - Submitted Transfers per Destination



Rucio DOMA - Failed Transfer Details

1–50 of 105

Time	payload.src-rse	payload.dst-rse	payload.protocol	payload.reason	payload.transfer-link
September 12th 2018, 14:45:20.712	DESY-PROMETHEUS_HTTPS	PRAGUELCG2_HTTPS	davs	TRANSFER [5] TRANSFER TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/e17c5044-b699-11e8-990f-02163e0170e3
September 12th 2018, 14:45:20.706	CERN-DPM-TRUNK_ROOT	PRAGUELCG2_ROOT	root	TRANSFER [38] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3013] query chksum is not supported	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/00b0b3ce-b69a-11e8-be33-fa163ededf
September 12th 2018, 14:45:20.705	CERN-DPM-TRUNK_ROOT	CERN-DPM-RC_ROOT	root	TRANSFER [38] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3013] query chksum is not supported	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/00bc9f90-b69a-11e8-9978-fa163e044255
September 12th 2018, 14:45:20.703	CERN-DPM-RC_ROOT	DESY-PROMETHEUS_ROOT	root	TRANSFER [2] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/e15b85a8-b699-11e8-b8b7-fa163e044255
September 12th 2018, 14:45:20.701	PRAGUELCG2_ROOT	DESY-PROMETHEUS_ROOT	root	TRANSFER [2] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/00cbed2e-b69a-11e8-be7d-02163e0170e3
September 12th 2018, 14:45:20.699	PRAGUELCG2_HTTPS	NEBRASKA_HTTPS	davs	TRANSFER [5] [gfalt_copy_file][perform_copy] TRANSFER [gfal_http_copy][gfal_http_copy] TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/008ab87c-b69a-11e8-850c-02163e00a077
September 12th 2018, 14:45:20.698	DESY-PROMETHEUS_HTTPS	PRAGUELCG2_HTTPS	davs	TRANSFER [5] TRANSFER TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/0706e446-b69a-11e8-ba91-fa163ededf
September 12th 2018, 14:45:20.697	CERN-DPM-TRUNK_ROOT	DESY-PROMETHEUS_ROOT	root	TRANSFER [2] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/00d7f506-b69a-11e8-a05a-02163e00a077
September 12th 2018, 14:45:20.695	CERN-DPM-TRUNK_ROOT	DESY-PROMETHEUS_ROOT	root	TRANSFER [2] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/4a1481f8-b69a-11e8-8a57-fa163e044255
September 12th 2018, 14:45:20.695	PRAGUELCG2_HTTPS	DESY-PROMETHEUS_HTTPS	davs	TRANSFER [5] TRANSFER TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/e188c450-b699-11e8-a05a-02163e00a077
September 12th 2018, 14:45:20.694	PRAGUELCG2_HTTPS	DESY-PROMETHEUS_HTTPS	davs	TRANSFER [5] TRANSFER TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/0070933e-b69a-11e8-8a57-fa163e044255
September 12th 2018, 14:45:20.692	CERN-DPM-RC_ROOT	DESY-PROMETHEUS_ROOT	root	TRANSFER [2] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/f9badfc2-b699-11e8-84dd-fa163ededf
September 12th 2018, 14:45:20.691	PRAGUELCG2_ROOT	CERN-DPM-RC_ROOT	root	TRANSFER [38] Error on XrdCl::CopyProcess::Run(): [ERROR] Server responded with an error: [3013] query chksum is not supported	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/4a238270-b69a-11e8-850c-02163e00a077
September 12th 2018, 14:45:20.674	NEBRASKA_HTTPS	PRAGUELCG2_HTTPS	davs	TRANSFER [5] [gfalt_copy_file][perform_copy] TRANSFER [gfal_http_copy][gfal_http_copy] TRANSFER STREAMED DISABLED Trying to fallback to a streamed copy, but they are disabled	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/c881effe-b699-11e8-9677-02163e00a077
				ss::Run(): [ERROR] Server responded with an error: [3011] No such file	https://fts3-devel.cern.ch:8449/fts3/ftsmon/#/job/e1427b8a-b699-11e8-baf5-

/kibana#/management?_g=(refreshInterval%3A(pause%3Atf%2Cvalue%3A30000)%2Ctime%3A(from%3Anow-4h%2Cmode%3Aquick%2Cto%3Anow))

Problems so far

- Setting up the instance took a bit longer than expected due to different problems:
  - Proxy delegation: accidentally created long & short proxy both with --voms dteam. Xrootd on DPM didn't like and fell back to mapfile (fixed together with Andrea & Fabrizio)
  - Rucio upload to dCache: cannot upload to dCache using Xrootd as it doesn't create the parent path (Has been reported to Paul: github issue)
  - No transfers with DPM/Xrootd: No support for checksum validation and we currently cannot disable it when submitting to FTS (Andrea is working on it)
  - Several small issues with permissions
- On the other hand: HTTPS transfers worked in most of the cases