



# ESCAPE

European Science Cluster of Astronomy &  
Particle physics ESFRI research Infrastructures

## ESCAPE WP2

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d'Altes Energies**



**Ciemat**

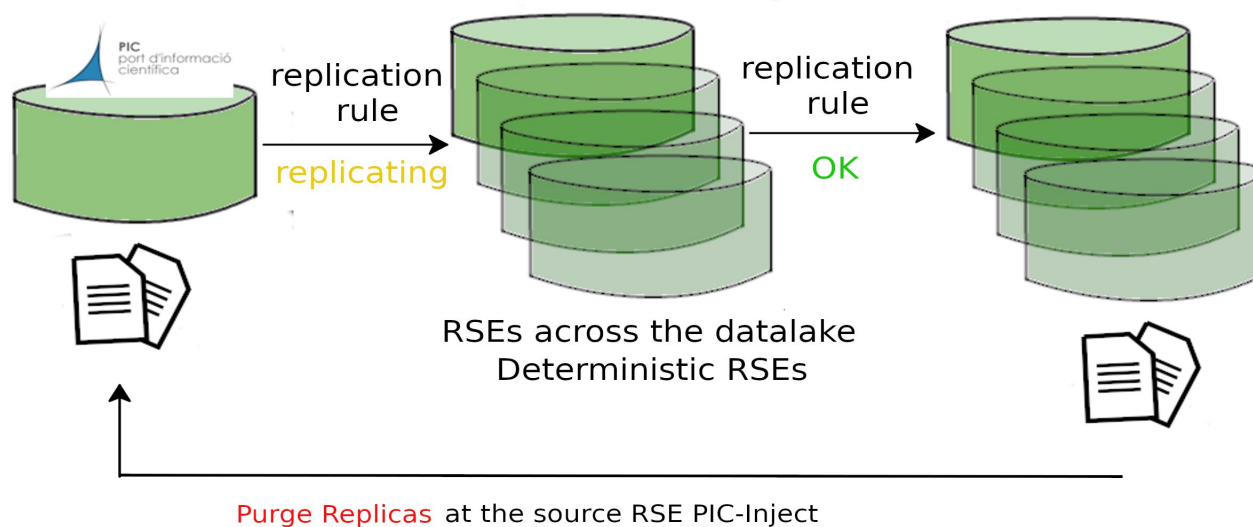
Centro de Investigaciones  
Energéticas, Medioambientales  
y Tecnológicas



ESCAPE-The European Science Cluster of Astronomy & Particle Physics Infrastructures has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement n1 824064

## 1) INTRODUCTION:

- a) Develop an automatic workflow that handle the large data sets produced by scientific sites.
- b) Files streamed from the telescope to the Data Lake for permanent storage and access.



## 2) STATUS

### Gamma-ray data injector prototype

1. Mimicking data:

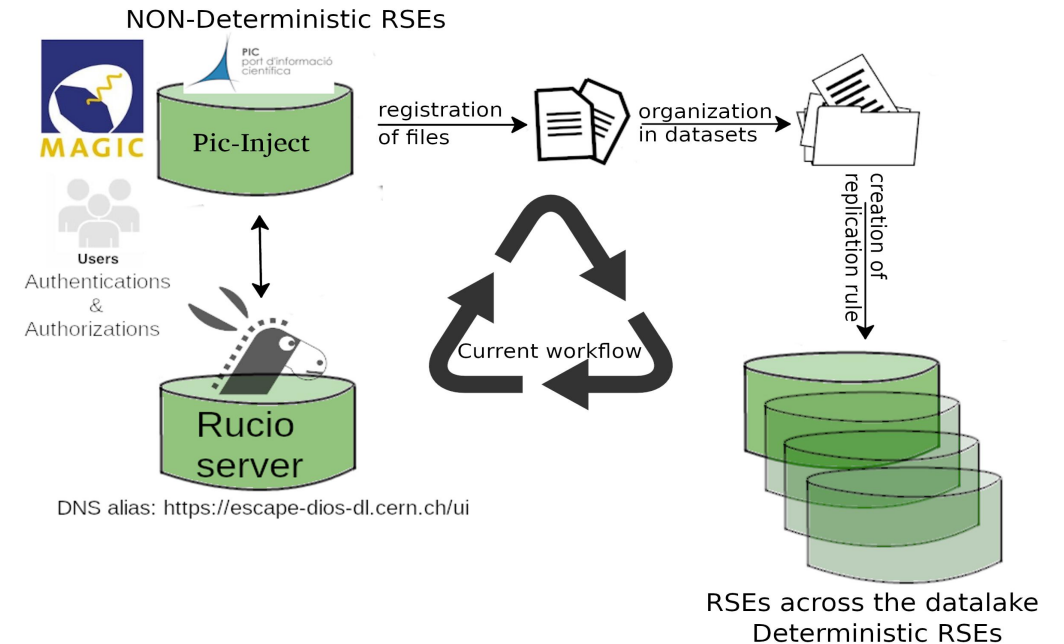
2. Two RSE:

a) NON-Deterministic RSE: Data is injected from the storage system located at the source (ORM La Palma in the future):

1. Allows to register files with their original path in the detector.
1. Mimicking the future config of an RSE at ORM.

a) Deterministic RSE: Destination of the data replicated:

- a) Allows to permanent sotrage acces data.



## 2) STATUS

### Gamma-ray data injector prototype

#### 1. Issues encountered :

##### 1. Negative lifetimes when deleting Rules

##### 2. Daemons reaper didn't delete files

Rucio UI Monitoring Data Transfers (R2D2) Admin  Search Using account: bruzzese

You are here: Rucio Rule Definition Droid - List Rules Rucio Version ( WebUI / Server ) : 1.23.11 / 1.23.11

Rules 1 New request

Account: bruzzese RSE: RSE State: Activity: User Subscriptions Interval: 300 days Apply

Show 100 entries Search:

Name	Account	RSE Expression	Creation Date	Remaining Lifetime	State	Locks OK	Locks Replicating	Locks Stuck
▲ MAGIC_PIC_BRUZZESE-Star_ST	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 14:31:04 UTC	-5711m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-Star_M1	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 12:13:28 UTC	-5819m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-Melibeia_ST	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 10:41:38 UTC	-5975m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-Star_M2	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 10:38:43 UTC	-5974m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-Calibrated_M2	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 08:33:13 UTC	-5973m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-Calibrated_M1	bruzzese	PIC-DCACHE	Thu, 19 Nov 2020 08:30:10 UTC	-5964m	STUCK	0	1	0
▲ MAGIC_PIC_BRUZZESE-test-Calibrated_M1	bruzzese	PIC-DCACHE	Fri, 20 Nov 2020 11:07:09 UTC	-10028m	STUCK	0	0	0

Showing 1 to 7 of 7 entries Previous 1 Next

Select all Cancel select

[download as JSON](#)

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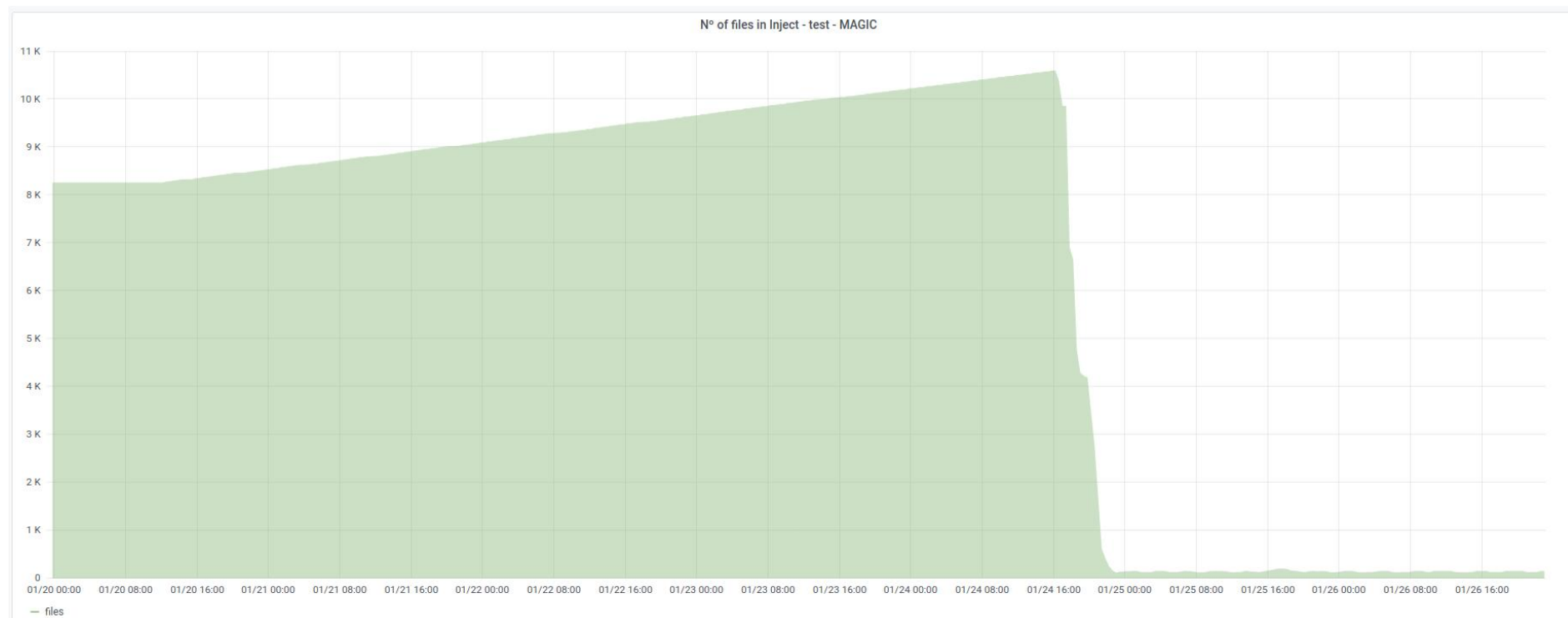


## 2) STATUS

### Gamma-ray data injector prototype

#### 1. Issues encountered :

- a) Negative lifetimes when deleting Rules
- b) Daemons was not able didn't delete files

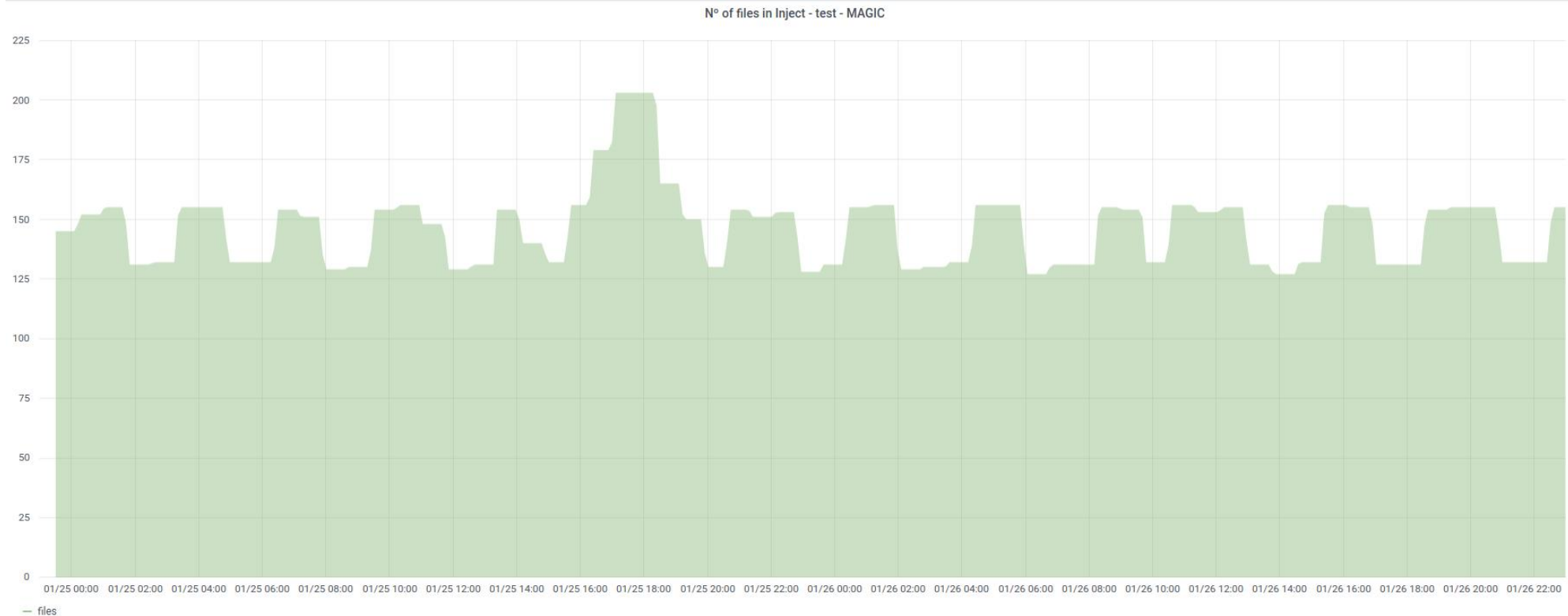


## 2) STATUS

### Gamma-ray data injector prototype

#### 1. Operative workflow:

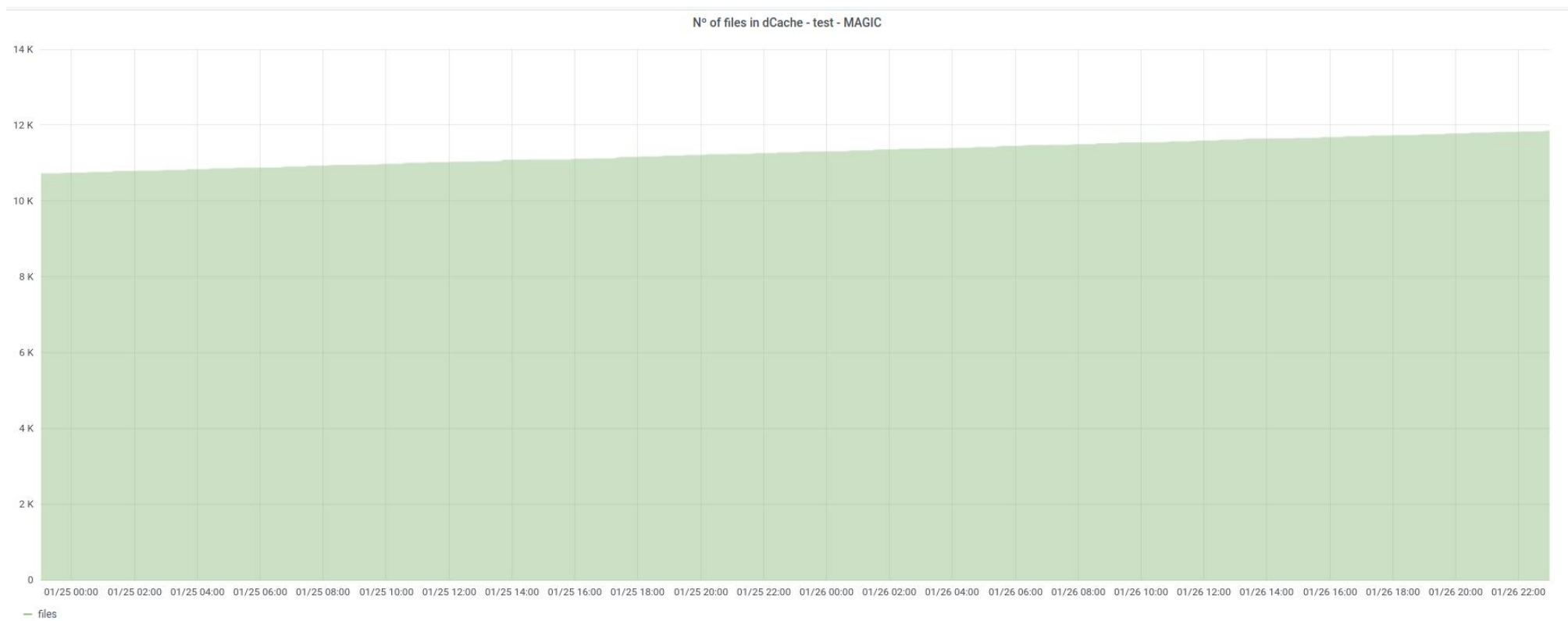
##### 1. Registration and deletion of files at source RSE



## 2) STATUS

### Gamma-ray data injector prototype

1. Operative workflow:
2. Success replication and permanent storage at destination RSE

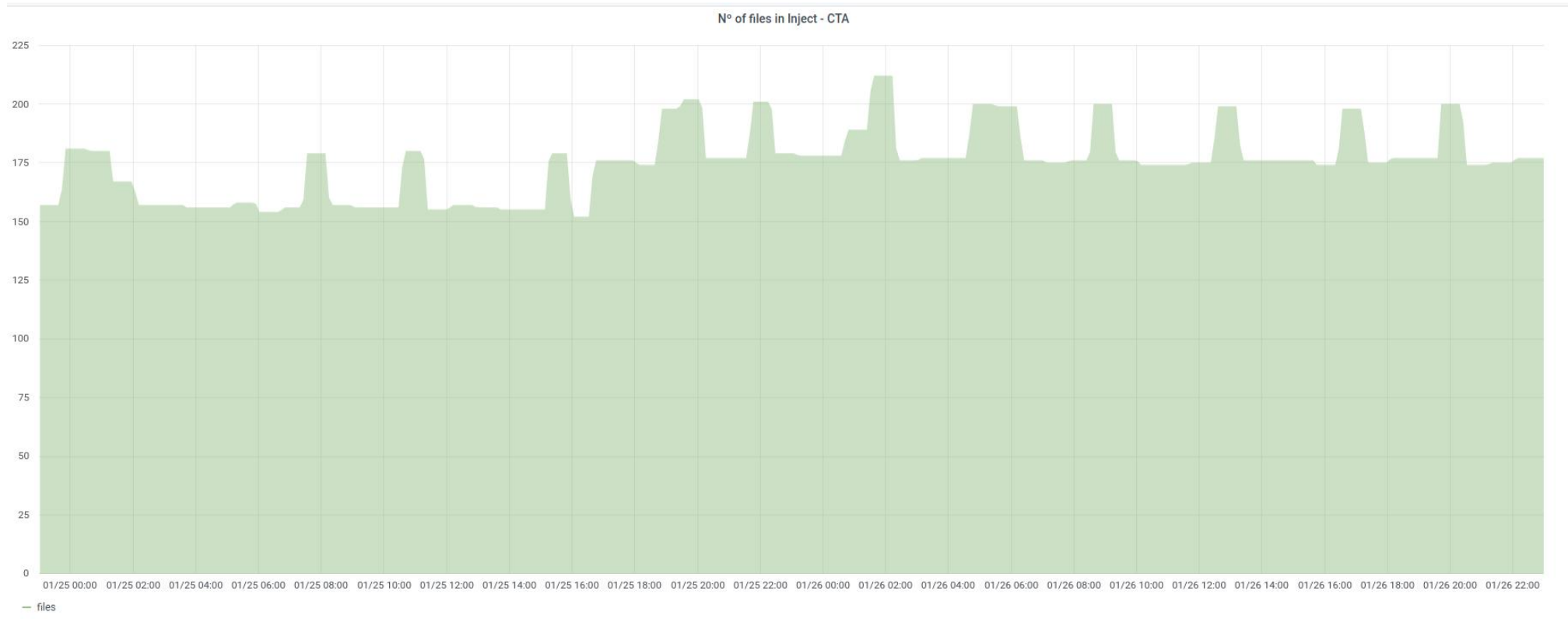


## 3) Immediate future

### CTA-LST data injector :

#### 1. Operative workflow:

##### 1. Registration and deletion of files at source RSE

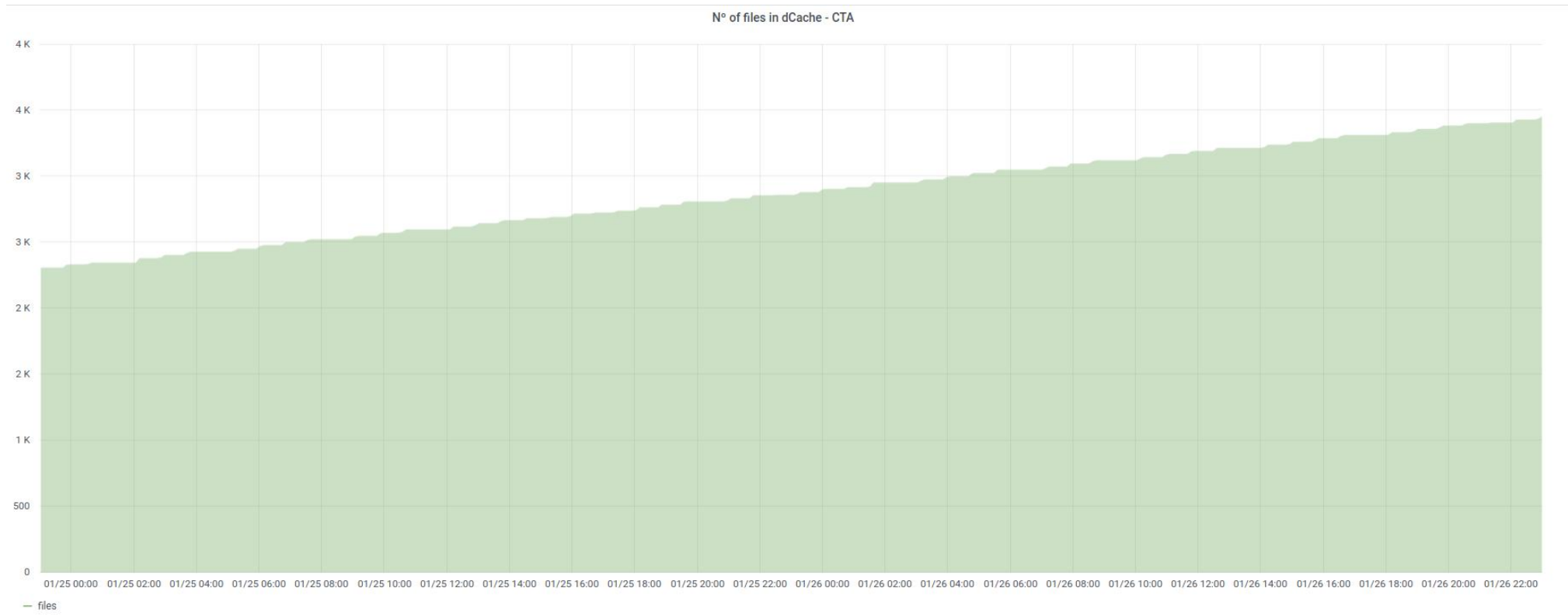




## 3) Immediate future

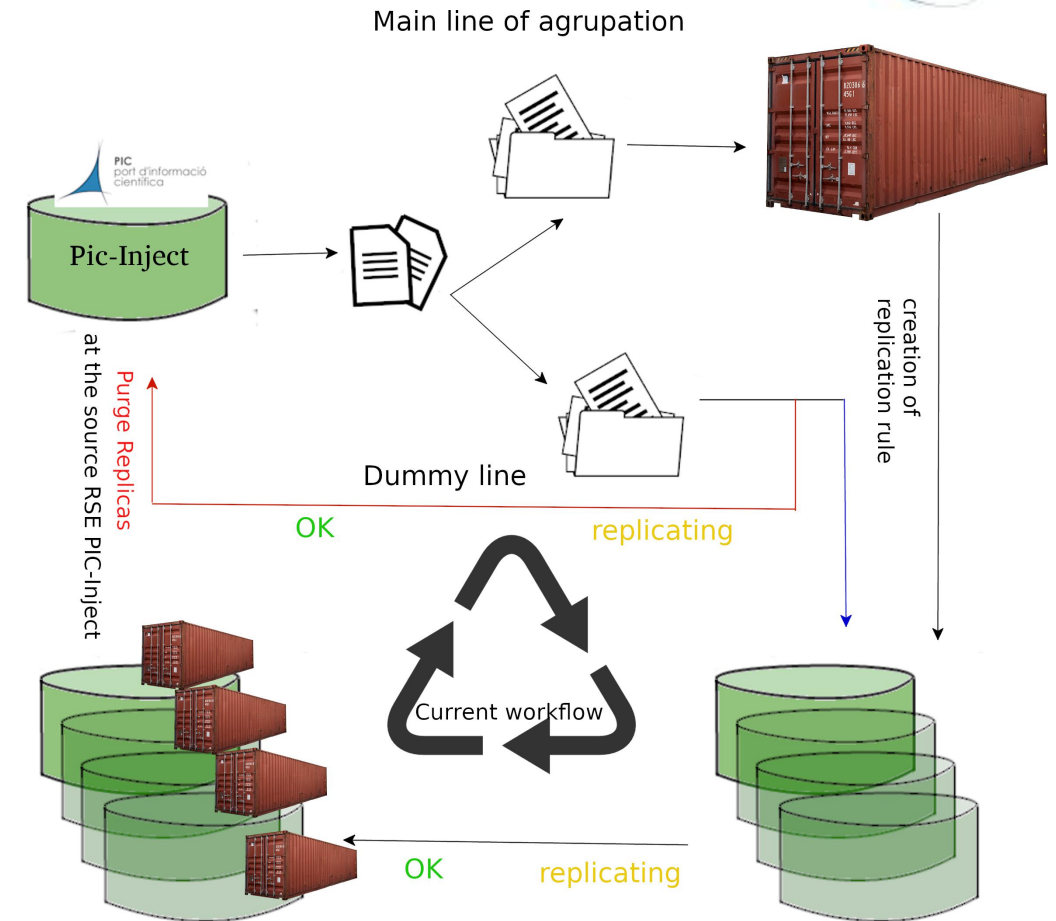
### CTA-LST data injector :

1. Operative workflow:
2. Success replication and permanent storage at destination RSE



## 4) FUTURE PLANS

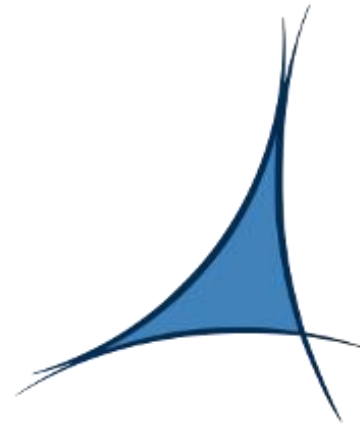
1. Develop an automatic workflow for the distribution of scientific data through the use of RUCIO
  - a) MAGIC experiment
  - b) LST-CTA
2. Next Steps:
  1. Setup a RSE in La Palma for the ingest operation
  2. In addition, we would like to start distributing real data from the LST experiments



# Thanks for listening

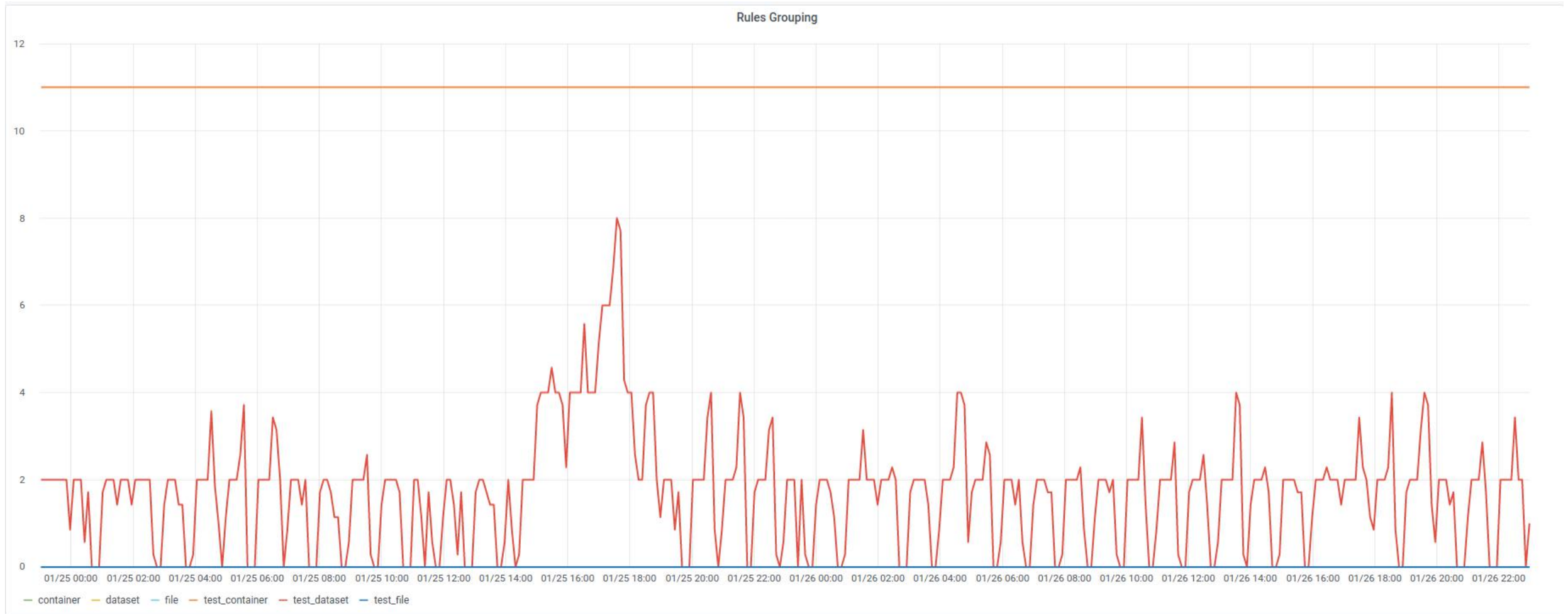
## Questions?

Thank you all for your tremendous support.



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# SI Figures



# SI Figures

Rucio UI

Monitoring ▾

Data Transfers (R2D2) ▾

Admin ▾

pattern OR name OR rule id

Search

Using account: bruzzese ▾

You are here: Rucio Rule Definition Droid - List Rules

Rucio Version ( WebUI / Server ): 1.24.1.post3 / 1.24.1.post3

Rules ⓘ

New request

Account

RSE

State

Activity

Interval

bruzzese

RSE

▾

User Subscriptions

14

days ▾

🕒

Apply

Show 100 ▾ entries

Search:

Name

Account

RSE Expression

Creation Date

Remaining Lifetime

State

Locks OK

Locks Replicating

Locks Stuck

Showing 1 to 11 of 11 entries

Previous

1

Next

Select all

Delete rule(s)

[download as JSON](#)