





Rucio WebUI

My internship report













Defining issues







DIDs undefined details

List DIDs

DID Search Pattern mock:*

Query for DID Types: O Container O Dataset O File

DID

Filter DID	Scope
mock:dataset_542a62aff313460e9939d3637c3b7c46	Name
mock:dataset_961da7a2fe814f79998f2e658d9cc1db	Created At NaN-NaN-NaN
mock:dataset_c3d8a9b9db9b457a82c59edcb2d42837	Updated At NaN-NaN-NaN
mock:dataset_45f1274c4aa04871bd53035fab38b390	DID Type Dataset
mock:dataset_bf553abff3524dab8426ddaf942f9cda	Account
mock:dataset_696aa3a76d6149d4b05aab728cc39578	Is Open False
mock:dataset_61ac3bb27792423e9ff118cae64667ea	Monotonic True
mock:dataset_test_dataset_e730f0580ead4103bf3438a6e17e70c7	Obsolete True
mock:dataset_751688498a9f4b12b3962e37e35b9271	Hidden
mock:dataset_7aaccbf043374c1b9d33122084de2810	Suppressed
No Errors 🗸	Purge Replicas

Availability

No Errors ✓ ≪
< 1 of 5 →
≫ Idle S



Go To DID Page

Search



RSEs details loading error









Login failing for identities with multiple accounts



Default	ATLAS	Operations	Data Management
		x509	
	Us	erpass	
	rname vika sword ••••		
Ac	count	Login	
		Login	





K

Searchbar not functioning

	Search		Dashboard	DIDs	RSEs	Rul
RSEs						
Pattern						
RSE Name		« < <u>1</u>	of Ø	»	RSE T	
Ү Ү						X

Streaming constraints

	Streaming constraints	
List RSEs		Search
Name Filter by RSE Name No Errors 🗸	RSE Type Volati « < 1 of 0 > »	le Deterministic Staging Idle 😋

Y

Y





Search	Dashboard	DIDs	RSEs	Rules	9 ~
ist DIDs					ĺ
D Search Pattern mock:*					Search
uery for DID Types: 🔵 Container	🔵 Dataset 🌑 Fil	e			
[D					
ilter DID					
ck:dataset_542a62aff313460e9939d3	637c3b7c46				
ck:dataset_961da7a2fe814f79998f2e	658d9cc1db				
ck:dataset_c3d8a9b9db9b457a82c59e	dcb2d42837				
ck:dataset_45f1274c4aa04871bd5303	5fab38b390				
ck:dataset_bf553abff3524dab8426dd	af942f9cda				
ck:dataset_696aa3a76d6149d4b05aab	728cc39578				
ck:dataset_61ac3bb27792423e9ff118	cae64667ea				
ck:dataset_test_dataset_e730f0580	ead4103bf3438a6e17	e70c7			
ck:dataset_test_dataset_5c8e37f1a	3a249f086a9d9bf3f2	0d3a6			
ck:dataset_7aaccbf043374c1b9d3312 	2084de2810				
	No Errors √ < 1 of 4	>	»		
	Fetching 🕕 🕻				
o DID selected					

r	oot				
ic	False				
e	[Fa]	se			
-	Fa]				
sed		lse			
eplicas	Tr	ue			
ility	Avai	lable			
					J
Fi	le Repl	ica Stat	es		
	Parer	nt DIDs			
	Met	adata			
	Q	Value			
		cd901af	-2abb468	79h537e9	07ff50e3
		cusofun	52055400	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0/115005
t		null			
<	5	of 5	>	»	
	Ľ				









My contribution





Parsing issue

List RSEs

RSE Search Pattern *

Name Filter by RSE Name	RSE Type	Volatile	Determinis 	tic Staging
XAYBFW-BB8-BB8-REBALANCE-RULE-FYZXZB	Disk	False	True	False
CERN-S3-LOGS	Disk	False	True	False
MOCK-DPFNEVBCGI	Disk	False	True	False
XAYBFW-GATEWAY-EXTERNAL-REPRESENTATION-GATEWAYEXTERNALREPRESENTATION-GATEWAY-EXPORTER-ESASIH	Disk	False	True	False
моск	Disk	False	True	False
MOCK-NEQHCINVCI	Таре	False	True	False
MOCK-OSYSKJREFB	Disk	False	True	False
MOCK-RYEJGFFVHO	Disk	False	True	False
XAYBFW-DATASET-REPLICAS-DATASETREPLICAUPDATE-UPDATE-COLLECTION-REPLICA-ZFXALH	Disk	False	True	False
XAYBFW-BAD-REPLICA-CLIENT-ADD-LIST-BAD-REPLICAS-ZKWAVJ	Disk	False	True	False
No Errors 🗸			Id	le 5



Search



Functional RSEs details



View RSE For RSE CERN-S3-LOGS										
Name CERN-S3-LOGS		Volatile		False						
RSE Type Disk		Determin	istic	True						
Availability		Staging	Area	False						
RSE Protocols Scheme Hostname	Port	Prefix	LAN/R	LAN/W	LAN/D	WAN/R	WAN/W	WAN/D	TPC/W	TPC/R
s3 cephgw.usatlas.bnl.gov	8443 rucio_b	ucket	1	1	1	1				
	«	< 1 of 1	> >>							
RSE Attributes										
RSE Attribute						_				
Filter RSE Attribute					va	lue				
CERN-S3-LOGS		True								
city		null								
continent		null								
country_name		null								
lfn2pfn_algorithm		hash								
region_code		null								
time_zone		null								
verify_checksum		True								
	«	< 1 of 1	> >>							



Functional DIDs details

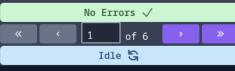
List DIDs

DID Search Pattern mock:*

Query for DID Types: O Container O Dataset O File

D	Ī	I	D		
_	-	-	_	-	-

Filter DID	
mock:dataset_542a62aff313460e9939d3637c3b7c46	
mock:dataset_961da7a2fe814f79998f2e658d9cc1db	
mock:dataset_c3d8a9b9db9b457a82c59edcb2d42837	
mock:dataset_45f1274c4aa04871bd53035fab38b390	
mock:dataset_bf553abff3524dab8426ddaf942f9cda	
mock:dataset_a76fa508a3134aecab8f22e1da7da386	
mock:dataset_696aa3a76d6149d4b05aab728cc39578	
mock:dataset_61ac3bb27792423e9ff118cae64667ea	
mock:dataset_test_dataset_e730f0580ead4103bf3438a6e17e70c7	
<pre>mock:dataset_test_dataset_5c8e37f1a3a249f086a9d9bf3f20d3a6</pre>	



Scope	mock	nock						
Name	data: b	dataset_961da7a2fe814f79998f2e658d9cc1d p						
Created At	2024	-10-24						
Updated At	2024	-10-24						
DID Type	Dat	aset						
Account	root							
Is Open	Tr	ue						
Monotonic	Fal	lse						
Obsolete		False						
Hidden		False						
Suppressed		False						
Purge Replicas		True						
Availability		Availab.	le					
		Go To	DID Page					

Search



Login with account choice











Streaming optimization

Expression ?					
*				Stop	0
Name		च Volatile		ੁ Staging	Ŧ
MOCK-JYRSLDJGDE @	TAPE		\checkmark		
MOCK-OVPVDTUFBQ 🖻	DISK				
XAYBFW-BB8-FULL-WORKFLOW-EAYWTO 🛃	DISK				
XAYBFW-BB8-FULL-WORKFLOW-RIFIYK 🛃	DISK				
MOCK-RDFMJYLJCA 🖻	DISK				
MOCK-TGDGCAYEPG 🖻	DISK		\checkmark		
XAYBFW-GATEWAY-EXTERNAL-REPRESENTATION-GATEWAYEXTERNALREPRESENTATION-GATEWAY-ACCOUNT	T-LIN DISK		\checkmark		
XAYBFW-BAD-REPLICA-ADD-LIST-BAD-REPLICAS-WZNJIF 🛃	DISK		\checkmark		
MOCK-DPFNEVBCGI 🖻	DISK				



Streaming optimization

Dataset	~	scope		: name	
Identifier					Ŧ
			No data y	/et	





Streaming optimization

RUIES				
Scope				
*				Search O
ID	DID	 〒 Created At 〒 Remaining State	Ξ OK	Replicating Stuck

No data yet

Loading 100k entries



Expression ?					
N *				Stop	0
Name	\Xi 🛛 Туре	〒 │ Volatile	ੁ ∣ Deterministic ੁ ਵ	Staging	Ŧ
RSE-WALLISANDFUTUNA-43 @	ТАРЕ				
RSE-SANMARINO-76 🖻	DISK				
RSE-IRAQ-83 🖻	DISK		~		
RSE-DEMOCRATICREPUBLICOFTHECONGO-68	DISK		~		
RSE-NAURU-73 @	UNKNOWN				
RSE-ROMANIA-85 🕫	UNKNOWN		~		
RSE-ISLEOFMAN-45 @	UNKNOWN		\checkmark		
RSE-BURUNDI-83 @	UNKNOWN				
RSE-TUVALU-49 @	UNKNOWN				
RSE-CURACAO-0 2	ТАРЕ		~		
RSE-TOKELAU-65 @	ТАРЕ		~		
RSE-INDIA-87 @	ТАРЕ		~		
RSE-PALESTINE-46 🖻	ТАРЕ				
RSE-ALGERIA-99 🖻	DISK				

Rule creation

1 DIDs	2 RSEs	3 Options	4 Summary	5	Result
Search					^
Dataset v mock	: *			Search	0
Identifier				╤ Size	
<pre>+ mock:/dataset_a847d8</pre>	f8f18240a09998b4d392e62624			0 Bytes	
<pre>+ mock:/dataset_0c2879</pre>	ac9b414e678bc04c545a950dcc			0 Bytes	
+ mock:/JAWRMW-abacus_	account-AbacusAccount2-abacus_accou	nt-dataset_2349b3a3d5bc41ed8f6179998097a	af5d	0 Bytes	
+ mock:/JAWRMW-abacus_	collection_replica-AbacusCollection	Replica-abacus_collection_replica-datase	et_e522b55c7a4b4c6a8c3d6a70f4cf4ebd	0 Bytes	
+ mock:/JAWRMW-abacus_collection_replica-AbacusCollectionReplica-abacus_collection_replica_new-dataset_bfc0f70cafe94c7484c8a47302c281fa					
+ mock:/JAWRMW-abacus_rse-AbacusRSE-abacus_rse-dataset_33b14008c2154235ace00b8c8dd20366					
+ mock:/dataset_dd2fcc715aae420cad259158b6d0f525					
+ mock:/dataset 3607d4	0 Bytes				

Next



Rule creation

111		Rule creation	on		1 /	
New Rule						
1 DIDs	2 RSEs	3 Options	4	Summary	5 Re	esults
Expression ?						ļ
*					Search	•
Name			च Quota	Total usage	Remaining ↓	
JAWRMW-RULE-CORE-RSE-CC	OUNTER-UNAVAILABLE-REPLICAS-NWNILH		No quota			
JAWRMW-SUBSCRIPTION-SUF	BSCRIPTIONCLIENT-RUN-TRANSMOGRIFIER-RK	.OAKJ	No quota			
JAWRMW-PREPARER-PREPARF	ER-SETTING-REQUEST-STATE-QUEUED-SXXKDU		No quota			
MOCK-EAFXMDNSZH			No quota			
JAWRMW-RSE-EXPRESSION-F	PARSER-RSEEXPRESSIONPARSERCLIENT-COMPL	.ICATED-EXPRESSION-GQVUGJ	No quota			
JAWRMW-SUBSCRIPTION-DAF	EMON-RUN-TRANSMOGRIFIER-CHAINED-SUBSCR	IPTION-EXCLUDE-SITE-ALGO-LMCRCO	No quota			
MOCK-PHFOQQLCAI			No quota			
JAWRMW-PREPARER-PREPARE	ER-SETTING-REQUEST-SOURCE-XBBLVV		No quota			
		\ll < Page 1 of 35 \rightarrow »				

• Out of 2 chosen RSEs, none have enough quota left. Please choose different RSEs or mark the rule as needing approval.

Ask for approval

Previous ←

Next

7=

 \rightarrow

Rule creation

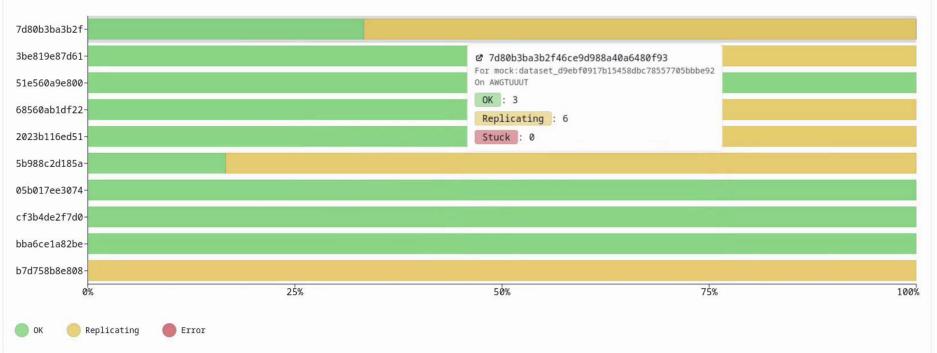
11/2		Rule creation	ו	1 /	
New Rule					
1 DIDs	2 RSEs	3 Options	4 Summary	5	Results
Copies *					
1					
Lifetime					٢
Comments *					
Test					
Receive notifications					
Advanced					٥
Grouping					
Undefined					~
Asynchronous					
Create a sample					
← Previous				Next	\rightarrow
				\checkmark	

Dashboard

Hello, jdoe! user

1//

Locks of latest rules

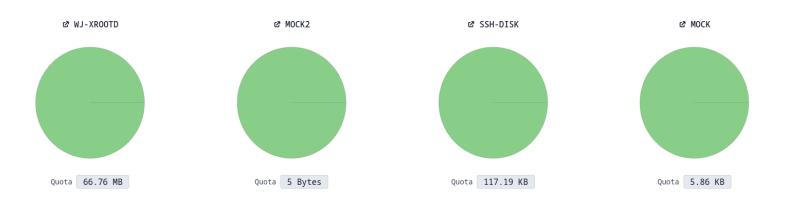




Dashboard

RSE Usage

Used Remaining









What's next?





- Extensive test coverage

- Reworking the rest of the views (coming soon!)

- Adjusting for different Rucio communities
- Adjusting for different browsers
- Refining the visual integrity

Focusing on client/server component architecture
 for performance benefits







Thank you!



