

# Hedvig S3 Protocol-Compatible Object Storage User Interface

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### **Using the Hedvig S3 User Interface**

The *Hedvig S3 User Interface* provides capabilities to perform basic operations on Hedvig S3 Protocol-Compatible Object Storage, such as browsing, uploading, and deleting.

# **Entering the Hedvig S3 dashboard**

After logging into the Hedvig WebUI, click the **Buckets** tab at the top to enter the Hedvig S3 dashboard.

Cluster Watch Virtual Disk Management Buckets	HedvigAdatin - Hedvig:Superliver newark   y-4.4 🔺 🔔
ickets	
d Bucket	
<b>멸</b> b1	07/07/2021 1:02 PM
g bucket1	06/14/2021 1:05 PM
😏 hello	06/18/2021 3:54 AM
g lucynewbucket1	07/13/2021 12:05 PM
g lucytestb1	06/14/2021 12:45 PM
🗑 new-bucket	07/07/2021 11:24 AM
g test-bucket-1	07/07/2021 12:40 AM
g test-bucket-2	07/07/2021 12:53 AM
g test-bucket-3	
g test-bucket-4	07/07/2021 11:18 AM
🗑 test-bucket-5	07/07/2021 11:21 AM
😨 test-bucket-7	07/20/2021 10:25 AM
g testbucket-6	07/07/2021 11:28 AM

Figure 1: Hedvig S3 dashboard

## **Creating new buckets**

To create a new bucket, click the **Add Bucket** button. In the **New Bucket** dialog, you can select attributes for the bucket, such as replication policy, disk residence type, and versioning status of the bucket at creation.

New Bucket		×
Name		
testbucket		
Protection Policy		
O Erasure 💿 Mirror		
Replication Policy		
Agnostic		~
Replication Factor		
3		
Compressed		
Residence		
HDD O Flash		
C Versioning enabled		
	Cancel	Create

Figure 2: New Bucket dialog

# **Performing operations on buckets**

To perform operations on a bucket, click the ... (ellipsis) to the left of the bucket. There are four possible operations:

- Modifying a bucket's ACL
- Modifying bucket versioning
- Exploring buckets
- Deleting buckets

🤨 Cluster Wat	ch Virtual Disk Management Buckets	Hedvigsdesin - Hedvigs:Boperikler 🛕 🛴	7 🌣
Buckets			\$
Name		Created At	
ErasureA	gnosticCompressedFlashVersioned	09/02/2021 9:29 PM	
Explore	psticNoCompressedHDDVersioned	09/02/2021 9:19 PM	
ACL	pressedHDDVersioned	09/02/2021 9:24 PM	
Versioning	ticR3CompressedHDDVersioned		
Delete	ticR3NoCompressedHDDVersion	09/02/2021 9·20 PM	
🗑 MirrorEra	sureAgnosticFlashVersioned	09/02/2021 9:27 PM	
😨 MirrorEra	sureCompressedFlashVersioned	09/02/2021 9:30 PM	
🗑 MirrorFla		08/31/2021 11:41 AM	
🗑 bucket1		07/12/2021 1:38 PM	
g bucket2		07/12/2021 1:39 PM	
🗑 bucket3		08/31/2021 11:22 AM	
g enabledo		08/31/2021 3:44 PM	
🗑 encryptic		09/07/2021 2:32 PM	
🗑 lucyversi		08/31/2021 4:10 PM	
😨 s3uiacl		08/31/2021 1:52 PM	

Figure 3: Operations for buckets

#### Viewing, adding, or modifying a bucket's ACL

In the ACL tab, you can view, add, or modify the current ACL for a bucket. For **New Grant**, you can give either a specified user ACL or a canned ACL, such as *AllUsers* and *AllAuthenticatedUsers*.

**Note**: Currently, if you grant the read/write ACL to another user, and that user is logged into the Hedvig S3 UI, they will not be able to view the granted bucket on the dashboard.

Bucket ACL	×	
Bucket <b>b1</b>		
Owner: 💄 HedvigAdmin		
Grants:		
No grants have been set up yet		
New Grant -		
User by ID	Close Save	
Everyone	0/10/12021-12:40 AM	
All Authenticated Users		

Figure 4: Modifying a bucket's ACL

#### Modifying bucket versioning

You can change the versioning status on a bucket – such as to change an unversioned bucket to a versioning-enabled bucket – or switch a versioning-enabled bucket to a versioning-suspended one.

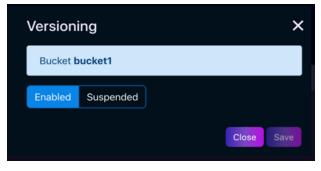


Figure 5: Modifying bucket versioning

#### **Exploring buckets**

Using the Explore option, you can view the list of objects in the selected bucket.

🤨 Cluster Watch Virtual Disk Manag	ement Buckets		Hedvigiddisin - Hedvig:SuperUser newsrk   v-4.4 🛕 🗘 🔅
Bucket browser			
All buckets / 🗑 hello			
New -			
More objects available			
Name	Size	Owner	Last Modified
► f2			
🖿 folder			
		HedvigAdmin	
shot-108.pna	53.3 kB	HedviaAdmin	about 1 month ado

Figure 6: Exploring buckets

#### **Deleting buckets**

To delete a bucket, select the **Delete** option. In the **Delete** dialog, confirm the bucket to be deleted, and select **Close** if you do not want to delete it, or **Delete** if you do.

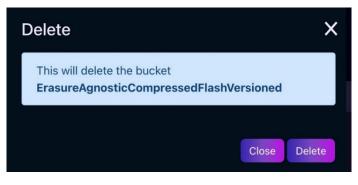


Figure 7: Deleting buckets

## **Performing operations on objects**

To perform operations on an object, click the ... (ellipsis) to the left of the object. There are five possible operations:

- Downloading objects
- Viewing and modifying object metadata
- Viewing objects with multiple versions
- Viewing, adding, or modifying an object's ACL
- Deleting objects

ف 🙋	Cluster Watch Virtual Disk Man	agement Buckets		HedvigAdsin - Hedvig:SuperUser 🛕 🗘 🛱
New -	1			
More obj	jects available			
1 >				
	🖿 f2			
	🖿 folder			
			HedvigAdmin	
	lighthouse-100.png		HedvigAdmin	
			HedvigAdmin	
			HedvigAdmin	
••••				
Dow	vnload		HedvigAdmin	
	adata		HedvigAdmin	
Vers	sions		HedvigAdmin	
Dele	ete		HedvigAdmin	
			HedvigAdmin	
	shot-111.png		HedvigAdmin	about 1 month ago

Figure 8: Operations for objects

#### **Downloading objects**

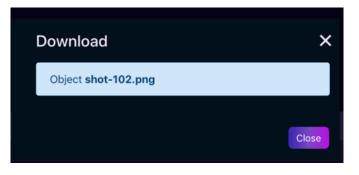


Figure 9: Downloading objects

#### Viewing and modifying object metadata

You can view and modify metadata, and you can add customized user metadata, as well.

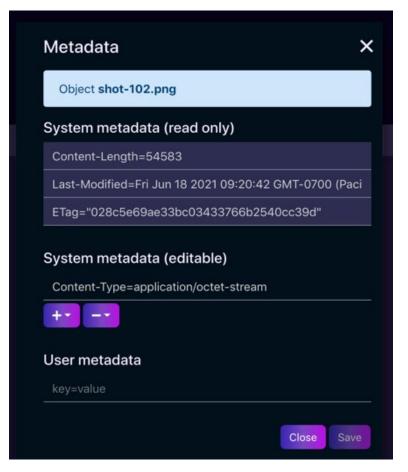


Figure 10: Viewing object metadata

Metadata	×	
Object <b>shot-101.png</b>		
System metadata (read only)		
Content-Length=54583		
Last-Modified=Fri Jun 18 2021 09:20:42 GMT-0700 (Paci		
ETag="028c5e69ae33bc03433766b2540cc39d"		
System metadata (editable) Content-Type=application/octet-stream		
User metadata userkey1=uservalue1		
key=value		
Close Save		

*Figure 11: Viewing object metadata (continued)* 

N	Metadata >			
	Object shot-101.png			
S	System metadata (read only)			
	Content-Length=54583			
	Last-Modified=Sun Jul 25 2021 21:47:20 GMT-0700 (Paci			
	ETag="028c5e69ae33bc03433766b2540cc39d"			
	Version-Id=148589			
System metadata (editable) Content-Type=application/octet-stream				
ι	Jser metadata			
	userkey1=uservalue1			
	Close Save			

Figure 12: Viewing metadata for a versioned object

#### Viewing objects with multiple versions

If an object has multiple versions, you can view it in the Object versions tab. (If the bucket is unversioned, there will be only one object with version null.)

Object versions			×
Object lighthouse-100.png			
Version ID	Size	Is latest	Last Modified
null	56.5 MB	Yes	06/18/2021 9:17 AM
			Close

Figure 13: Viewing objects with multiple versions

#### Viewing, adding, or modifying an object's ACL

In the ACL tab, you can view, add, or modify the current ACL for an object. For **New Grant**, you can give either a specified user ACL or a canned ACL, such as *AllUsers* and *AllAuthenticatedUsers*.

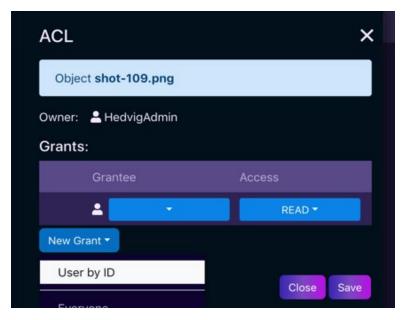


Figure 14: ACL tab

ACL			×		
Object sho	Object shot-109.png				
Owner: 💄 He Grants:	Owner: 💄 HedvigAdmin Grants:				
Gran	tee	Access			
		READ 🔻			
New Grant -	HedvigAdmin				
	Openstack				
	newark	Close	Save		

Figure 15: ACL tab (continued)

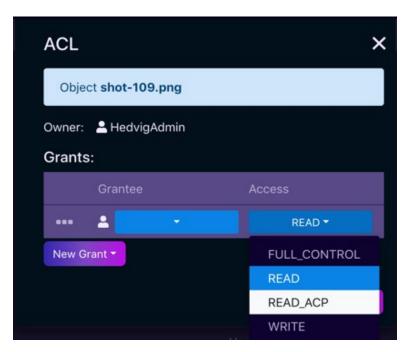


Figure 16: ACL tab (continued 2)

#### **Deleting objects**

You can delete one object, or you can delete multiple objects simultaneously.

To delete multiple objects, select all of the objects that you need to delete, and click the ... (ellipsis) at the top. You will see the option to delete all of the objects that you have selected.

All buckets / 🕏 versionbk3     New*     Image: Size   Owner     Last Modified     Delete 4 objects   2511 kB     PWD.rtt   114.1 kB     HedvigAdmin   2 days ago     enc-1   0 B	۹	Cluster Watch Virtual Disk Managemen	Buckets		HedvigAdmin - Hedvig:SuperUser 🛕 🗘 🔯
Name   Size   Owner   Last Modified     Delete 4 objects   251.1 kB   HedvigAdmin   2 days ago     PWD.rtt   114.1 kB   HedvigAdmin   9 days ago     enc-1   0 B   HedvigAdmin   2 days ago	Buc	kets			ø
Size Owner Last Modified   Delete 4 objects 251.1 kB HedvigAdmin 2 days ago   PWD.rtt 114.1 kB HedvigAdmin 9 days ago   enc-1 0 B HedvigAdmin 2 days ago	All bu	uckets / 📴 versionbk3			
Delete 4 objects 251.1 kB HedvigAdmin 2 days ago   PWD.rtt 114.1 kB HedvigAdmin 9 days ago   enc-1 0 B HedvigAdmin 2 days ago	New -				
Delete 4 Objects   PWD.rtl 114.1 kB   HedvigAdmin 9 days ago   enc-1 0 B   HedvigAdmin 2 days ago		••• Name	Size	Owner	Last Modified
enc-1 0 B HedvigAdmin 2 days ago		Delete 4 objects	251.1 kB	HedvigAdmin	2 days ago
		PWD.rtf	114.1 kB	HedvigAdmin	9 days ago
			0 B	HedvigAdmin	2 days ago
meeting-93198779808.ics 2.3 kB HedvigAdmin 2 days ago		meeting-93198779808.ics	2.3 kB	HedvigAdmin	2 days ago

Figure 17: Deleting multiple objects simultaneously

## Additional operations for buckets

For buckets, you can use the **New** button to perform three additional operations:

- Creating new (empty) files
- Creating new folders
- Uploading files

🥺 Cluster Watch Virtual Disk Managi	ement Buckets		Hedvägädmän – Hedväg SuperUser 🛕 🗘 🗱
Bucket browser			
All buckets / 😨 hello			
New -			
🔓 File 🤢			
1 Upload			
Name	Size	Owner	Last Modified
🖿 f2			
🖿 folder			
		HedvigAdmin	18 days ago
lighthouse-100.png		HedvigAdmin	
		HedvigAdmin	about 1 month ago
		HedvigAdmin	
		HedvigAdmin	

Figure 18: Operations for buckets under the New button

#### Creating new (empty) files

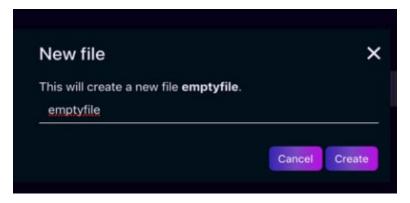


Figure 19: Creating an empty file

#### **Creating new folders**

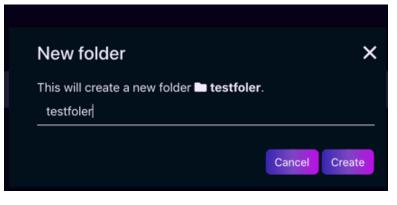


Figure 20: Creating a new folder

#### **Uploading files**

If your cluster has KMS set up, while uploading files you can also turn on the encrypt option to upload the object with AES-256 encryption.

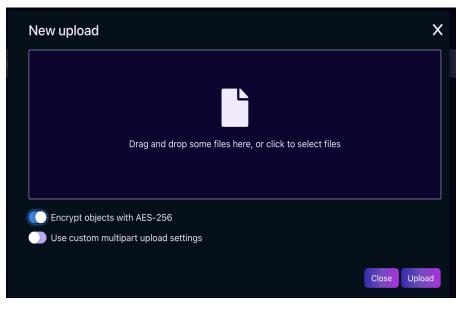
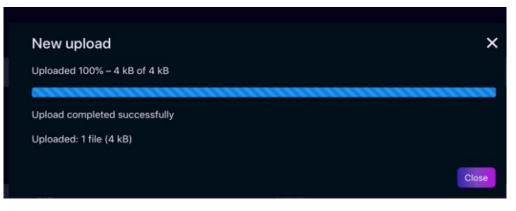


Figure 21: Uploading files with AES-256 encryption



*Figure 22: Uploading files -- completed successfully* 

When you upload a large object, you can make it a multipart upload. You can specify the threshold and chunk size. The default is that any objects larger than 100 MB will be uploaded with chunk size of 10 MB.

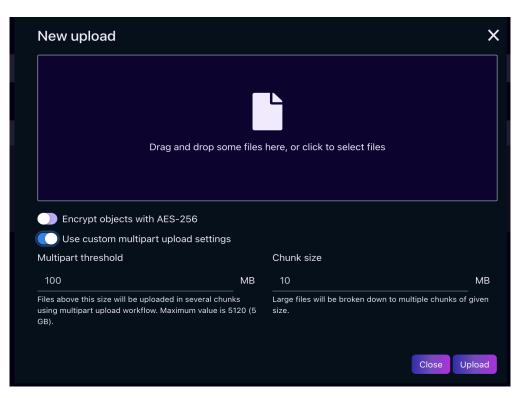


Figure 23: Uploading files with custom multipart upload settings

# Appendix A: Hedvig S3 UI functionality support matrix

S3 API	Supported
put-bucket-acl	Yes
get-bucket-acl	Yes
put-bucket-cors	No
get-bucket-cors	No
delete-bucket-cors	No
put-bucket-policy	No
get-bucket-policy	No
delete-bucket-policy	No
put-bucket-tagging	No
get-bucket-tagging	No
delete-bucket-tagging	No
put-bucket-versioning	Yes
get-bucket-versioning	Yes
create-bucket	Yes
delete-bucket	Yes
head-bucket	Yes
list-buckets	Yes
list-objects / list-objects-v2	Yes
list-object-versions	Yes
put-object	Yes
copy-object	No
get-object	Yes

S3 API	Supported
delete-object	Yes
delete-objects	Yes
put-object-acl	Yes
get-object-acl	Yes
put-object-tagging	No
get-object-tagging	No
delete-object-tagging	No
head-object	Yes
put-object-retention	No
get-object-retention	No
put-object-legal-hold	No
get-object-legal-hold	No
put-object-lock-configuration	No
get-object-lock-configuration	No
abort-multipart-upload	No
complete-multipart-upload	Yes
create-multipart-upload	Yes
list-multipart-uploads	No
list-parts	No
upload-part	Yes
upload-part-copy	No

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Software-defined AES-256, FIPS compliant encryption of data in flight and at rest.