Article Number: 000020748



## ECS: Capacity dashboard explained

Summary: ECS -> Elastic Cloud Storage

### **Article Content**

#### Instructions

ECS UI provides Capacity and Space reclamation details.

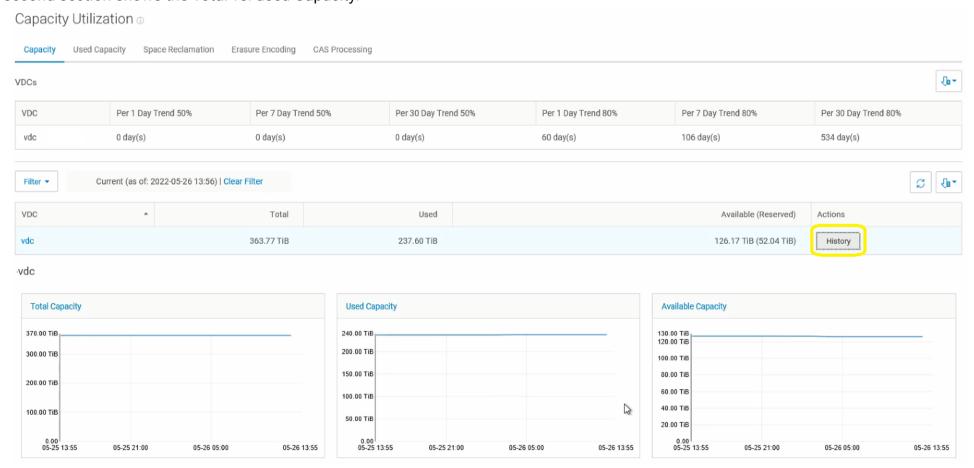
To get to these details, go to the ECS UI > Monitor > Capacity Utilization.

The "Capacity" tab explains the ECS capacity trend projection and the History button show ingest rates historically.

The first section of this tab shows a trend which is based on 1, 7 and 30-day historical averages.

It shows the estimated days to 50% (if the system is below that level), for 80%. It is recommended to act if the 80% ETA is less than 60-90 days.

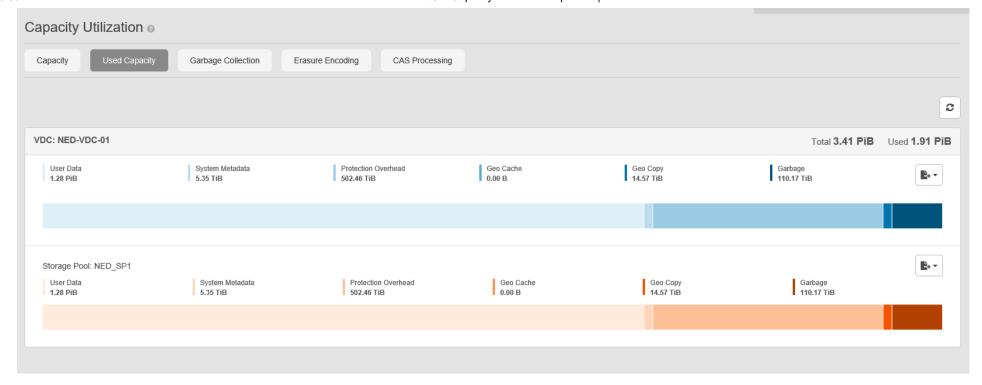
The second section shows the Total vs. used Capacity.



## "Used Capacity" tab

This provides a further breakdown of the used capacity contribution.

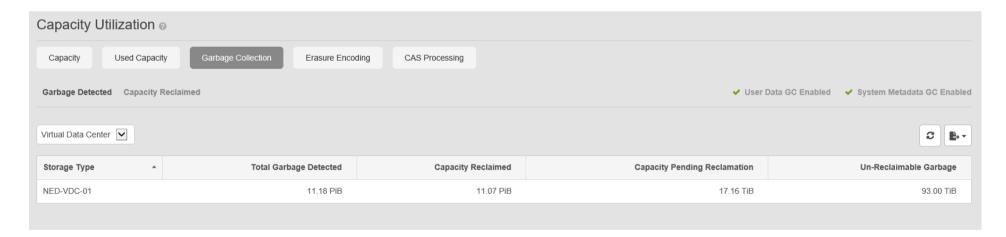
- 1. User data: The size of data ingested directly to this VDC from customer applications. This data is saved in REPO chunks.
- 2. System metadata: Is essentially Journal and Btree Chunks. This includes all metadata on user data and other system metadata.
- 3. **Protection overhead:** All Chunks (REPO, Journal, or Btree) are protected on the system by either Erasure coding, triple mirroring, or a combination of both. The protection scheme adds an overhead. This protection overhead account's for active data, garbage data and replicated data.
- 4. **Geo Copy**: Geo Copy data is replicated data from other VDCs.
- 5. Garbage: This is the total garbage that the system holds inside all types of chunks that are combined, and has not been reclaimed yet.



# **Garbage Collection Tab**

This tab gives a summary of space reclamation numbers.

- 1. **Total Garbage detected:** This is the sum of all garbage (REPO or BTREE) that the system has detected since its inception. By detected here we mean that the system has recognized it but not necessarily reclaimed it.
- 2. **Capacity Reclaimed:** This is the total amount of all garbage or any type of chunks that was reclaimed. Note, that this number does not account for protection overhead.
- 3. **Capacity pending reclamation:** This is the amount of garbage, for both (REPO and BTREE) combined, that is eligible for reclaims and still in the pipeline. ECS has an occupancy threshold for both REPO and Btree chunks, respectively, 66% and 5%. The chunks are not considered actionable garbage unless these thresholds are met.
- 4. **Un-reclaimable garbage:** This is garbage that the system has detected, but does not **yet** meet the thresholds that are mentioned in (3). No action can be taken on un-reclaimable garbage until those chunks meet the threshold which happens as more deletions occur. The expected amount of unreclaimable garbage is anywhere less than 15% of the total used capacity.



### Additional Information

For further details, the monitoring guide can be consulted <u>ECS-3.X-Monitoring-Guide requires</u> logging into the support site.

To find out more about the command-line instructions or if you are seeing issues this is a great place to start ECS Troubleshooting Guide.

Please see this video:



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## **Article Properties**

### **Affected Product**

**Elastic Cloud Storage** 

### **Product**

**Elastic Cloud Storage** 

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