Monitor and audit operations

StorageGRID 11.7

NetApp
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Monitor and audit operations

Monitor object ingest and retrieval rates

You can monitor object ingest and retrieval rates as well as metrics for object counts, queries, and verification. You can view the number of successful and failed attempts by client applications to read, write, and modify objects in the StorageGRID system.

Steps

1. Sign in to the Grid Manager using a supported web browser.
2. On the dashboard, select **Performance** > **S3 operations** or **Performance** > **Swift operations**.

   This section summarizes the number of client operations performed by your StorageGRID system. Protocol rates are averaged over the last two minutes.

3. Select **NODES**.
4. From the Nodes home page (deployment level), click the **Load Balancer** tab.

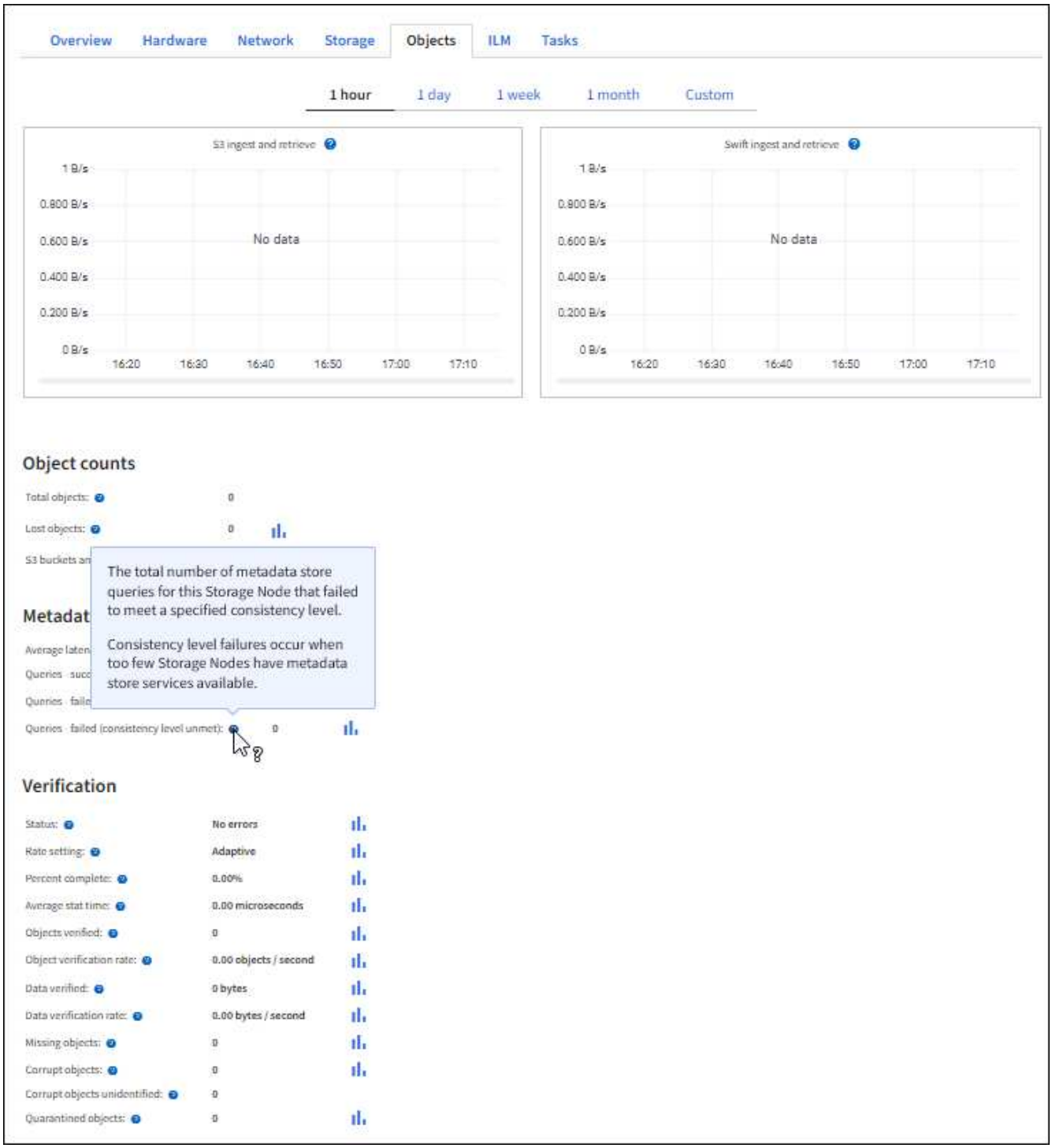
   The charts show trends for all client traffic directed to load balancer endpoints within the grid. You can select a time interval in hours, days, weeks, months, or years, or you can apply a custom interval.

5. From the Nodes home page (deployment level), click the **Objects** tab.

   The chart shows ingest and retrieve rates for your entire StorageGRID system in bytes per second and total bytes. You can select a time interval in hours, days, weeks, months, or years, or you can apply a custom interval.

6. To see information for a particular Storage Node, select the node from the list on the left, and click the **Objects** tab.

   The chart shows the object ingest and retrieval rates for this Storage Node. The tab also includes metrics for object counts, queries, and verification. You can click the labels to see the definitions of these metrics.



7. If you want even more detail:
   a. Select **SUPPORT** > **Tools** > **Grid topology**.
   b. Select ***site*** > **Overview** > **Main**.

      The API Operations section displays summary information for the entire grid.

   c. Select ***Storage Node*** > **LDR** > ***client application*** > **Overview** > **Main**

      The Operations section displays summary information for the selected Storage Node.

Access and review audit logs

Audit messages are generated by StorageGRID services and stored in text log files. API-specific audit messages in the audit logs provide critical security, operation, and performance monitoring data that can help you evaluate the health of your system.

Before you begin

- You have specific access permissions.
- You have the `Passwords.txt` file.
- You know the IP address of an Admin Node.

About this task

The active audit log file is named `audit.log`, and it is stored on Admin Nodes.

Once a day, the active audit.log file is saved, and a new `audit.log` file is started. The name of the saved file indicates when it was saved, in the format *`yyyy-mm-dd.txt`*.

After a day, the saved file is compressed and renamed, in the format *`yyyy-mm-dd.txt.gz`*, which preserves the original date.

This example shows the active `audit.log` file, the previous day's file (`2018-04-15.txt`), and the compressed file for the prior day (`2018-04-14.txt.gz`).

```
audit.log
2018-04-15.txt
2018-04-14.txt.gz
```

Steps

1. Log in to an Admin Node:
   a. Enter the following command: `ssh admin@`*`primary_Admin_Node_IP`*
   b. Enter the password listed in the `Passwords.txt` file.
   c. Enter the following command to switch to root: `su -`
   d. Enter the password listed in the `Passwords.txt` file.

      When you are logged in as root, the prompt changes from `$` to `#`.
2. Go to the directory containing the audit log files:

   ```
   cd /var/local/audit/export
   ```
3. View the current or a saved audit log file, as required.

S3 operations tracked in the audit logs

Several bucket operations and object operations are tracked in the StorageGRID audit logs.

Bucket operations tracked in the audit logs

- DELETE Bucket
- DELETE Bucket tagging
- DELETE Multiple Objects
- GET Bucket (List Objects)
- GET Bucket Object versions
- GET Bucket tagging
- HEAD Bucket
- PUT Bucket
- PUT Bucket compliance
- PUT Bucket tagging
- PUT Bucket versioning

Object operations tracked in the audit logs

- Complete Multipart Upload
- Upload Part (when the ILM rule uses the Balanced or Strict ingest behaviors)
- Upload Part - Copy (when the ILM rule uses the Balanced or Strict ingest behaviors)
- DELETE Object
- GET Object
- HEAD Object
- POST Object restore
- PUT Object
- PUT Object - Copy

Related information

Operations on buckets

Operations on objects

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