



# Explore StorageGRID

StorageGRID 11.8

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# Table of Contents

- Explore StorageGRID..... 1
  - Explore the Grid Manager ..... 1
  - Explore the Tenant Manager ..... 7

# Explore StorageGRID

## Explore the Grid Manager

The Grid Manager is the browser-based graphical interface that allows you to configure, manage, and monitor your StorageGRID system.



The Grid Manager is updated with each release and might not match the example screenshots on this page.

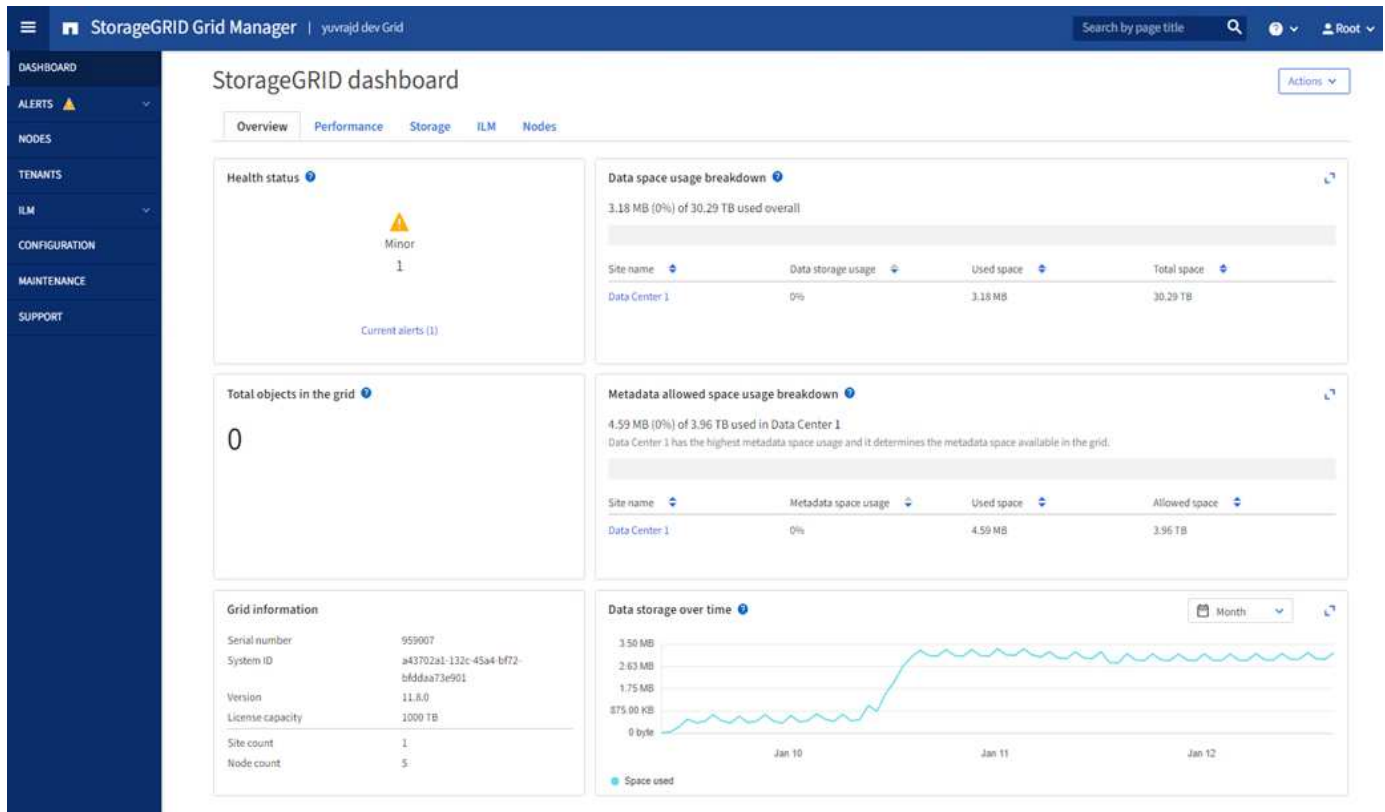
When you sign in to the Grid Manager, you are connecting to an Admin Node. Each StorageGRID system includes one primary Admin Node and any number of non-primary Admin Nodes. You can connect to any Admin Node, and each Admin Node displays a similar view of the StorageGRID system.

You can access the Grid Manager using a [supported web browser](#).

## Grid Manager dashboard

When you first sign in to the Grid Manager, you can use the dashboard to [monitor system activities](#) at a glance.

The dashboard contains information about system health and performance, storage use, ILM processes, S3 and Swift operations, and the nodes in the grid. You can [configure the dashboard](#) by selecting from a collection of cards that contain the information you need to effectively monitor your system.



For an explanation of the information shown on each card, select the help icon (?) for that card.

## Search field

The **Search** field in the header bar allows you to quickly navigate to a specific page within Grid Manager. For example, you can enter **km** to access the Key management server (KMS) page. You can use **Search** to find entries in the sidebar of the Grid Manager and on the Configuration, Maintenance, and Support menus.

## Help menu

The help menu  provides access to:

- The [FabricPool](#) and [S3 setup](#) wizard
- The StorageGRID documentation center for the current release
- [API documentation](#)
- Information about which version of StorageGRID is currently installed

## Alerts menu

The Alerts menu provides an easy-to-use interface for detecting, evaluating, and resolving issues that might occur during StorageGRID operation.

From the Alerts menu, you can do the following to [manage alerts](#):

- Review current alerts
- Review resolved alerts
- Configure silences to suppress alert notifications
- Define alert rules for conditions that trigger alerts
- Configure the email server for alert notifications

## Nodes page

The [Nodes page](#) displays information about the entire grid, each site in the grid, and each node at a site.

The Nodes home page displays combined metrics for the entire grid. To view information for a particular site or node, select the site or node.

# Nodes

View the list and status of sites and grid nodes.

Search...

Total node count: 14

| Name ?                 | Type               | Object data used ? | Object metadata used ? | CPU usage ? |
|------------------------|--------------------|--------------------|------------------------|-------------|
| StorageGRID Deployment | Grid               | 0%                 | 0%                     | —           |
| ^ Data Center 1        | Site               | 0%                 | 0%                     | —           |
| ✓ DC1-ADM1             | Primary Admin Node | —                  | —                      | 21%         |
| ✓ DC1-ARC1             | Archive Node       | —                  | —                      | 8%          |
| ✓ DC1-G1               | Gateway Node       | —                  | —                      | 10%         |
| ✓ DC1-S1               | Storage Node       | 0%                 | 0%                     | 29%         |

## Tenants page

The [Tenants](#) page allows you to [create and monitor the storage tenant accounts](#) for your StorageGRID system. You must create at least one tenant account to specify who can store and retrieve objects and which functionality is available to them.

The Tenants page also provides usage details for each tenant, including the amount of storage used and the number of objects. If you set a quota when you created the tenant, you can see how much of that quota has been used.

# Tenants

View information for each tenant account. Depending on the timing of ingests, network connectivity, and node status, the usage data shown might be out of date. To view more recent values, select the tenant name.

Create

Export to CSV

Actions

Search tenants by name or ID

Q

Displaying 2 results

| <input type="checkbox"/> | Name         | Logical space used | Quota utilization | Quota     | Object count | Sign in/Copy URL                    |
|--------------------------|--------------|--------------------|-------------------|-----------|--------------|-------------------------------------|
| <input type="checkbox"/> | S3 Tenant    | 0 bytes            | <div></div> 0%    | 100.00 GB | 0            | <a href="#">↗</a> <a href="#">📄</a> |
| <input type="checkbox"/> | Swift Tenant | 0 bytes            | <div></div> 0%    | 100.00 GB | 0            | <a href="#">↗</a> <a href="#">📄</a> |

← Previous 1 Next →

## ILM menu

The [ILM menu](#) allows you to [configure the information lifecycle management \(ILM\) rules and policies](#) that govern data durability and availability. You can also enter an object identifier to view the metadata for that object.

From the ILM menu you can view and manage ILM:

- Rules
- Policies
- Policy tags
- Storage pools
- Erasure coding
- Storage grades
- Regions
- Object metadata lookup

## Configuration menu

The Configuration menu allows you to specify network settings, security settings, system settings, monitoring options, and access control options.

### Network tasks

Network tasks include:

- [Managing high availability groups](#)
- [Managing load balancer endpoints](#)
- [Configuring S3 endpoint domain names](#)
- [Managing traffic classification policies](#)
- [Configuring VLAN interfaces](#)

### Security tasks

Security tasks include:

- [Managing security certificates](#)
- [Managing internal firewall controls](#)
- [Configuring key management servers](#)
- Configuring security settings including the [TLS and SSH policy](#), [network and object security options](#), and [interface security settings](#).
- Configuring the settings for a [storage proxy](#) or an [admin proxy](#)

### System tasks

System tasks include:

- Using [grid federation](#) to clone tenant account information and replicate object data between two StorageGRID systems.
- Optionally, enabling the [Compress stored objects](#) option.
- [Managing S3 Object Lock](#)
- Understanding Storage options such as [object segmentation](#) and [storage volume watermarks](#).

## Monitoring tasks

Monitoring tasks include:

- [Configuring audit messages and log destinations](#)
- [Using SNMP monitoring](#)

## Access control tasks

Access control tasks include:

- [Managing admin groups](#)
- [Managing admin users](#)
- Changing the [provisioning passphrase](#) or [node console passwords](#)
- [Using identity federation](#)
- [Configuring SSO](#)

## Maintenance menu

The Maintenance menu allows you to perform maintenance tasks, system maintenance, and network maintenance.

### Tasks

Maintenance tasks include:

- [Decommission operations](#) to remove unused grid nodes and sites
- [Expansion operations](#) to add new grid nodes and sites
- [Grid node recovery procedures](#) to replace a failed node and restore data
- [Rename procedures](#) to change the display names of your grid, sites, and nodes
- [Object existence check operations](#) to verify the existence (although not the correctness) of object data
- Performing a [rolling reboot](#) to restart multiple grid nodes
- [Volume restoration operations](#)

## System

System maintenance tasks you can perform include:

- [Viewing StorageGRID license information](#) or [updating license information](#)
- Generating and downloading the [Recovery Package](#)
- Performing StorageGRID software updates, including software upgrades, hotfixes, and updates to the

SANtricity OS software on selected appliances

- [Upgrade procedure](#)
- [Hotfix procedure](#)
- [Upgrade SANtricity OS on SG6000 storage controllers using Grid Manager](#)
- [Upgrade SANtricity OS on SG5700 storage controllers using Grid Manager](#)

## Network

Network maintenance tasks you can perform include:

- [Configuring DNS servers](#)
- [Updating Grid Network subnets](#)
- [Managing NTP servers](#)

## Support menu

The Support menu provides options that help technical support analyze and troubleshoot your system. There are three parts to the Support menu: Tools, Alarms (legacy), and Other.

### Tools

From the Tools section of the Support menu, you can:

- [Configure AutoSupport](#)
- [Run diagnostics](#) on the current state of the grid
- [Access the Grid Topology tree](#) to view detailed information about grid nodes, services, and attributes
- [Collect log files and system data](#)
- [Review support metrics](#)



The tools available from the **Metrics** option are intended for use by technical support. Some features and menu items within these tools are intentionally non-functional.

### Alarms (legacy)

From the [Alarms \(legacy\)](#) section of the Support menu, you can:

- Review current, historical, and global alarms
- Set up custom events
- Set up [email notifications for legacy alarms](#)



While the legacy alarm system continues to be supported, the alert system offers significant benefits and is easier to use.

### Other

From the Other section of the Support menu, you can:



- Manage [link cost](#)
- View [Network Management System \(NMS\)](#) entries
- Manage [storage watermarks](#)

## Explore the Tenant Manager

The [Tenant Manager](#) is the browser-based graphical interface that tenant users access to configure, manage, and monitor their storage accounts.



The Tenant Manager is updated with each release and might not match the example screenshots on this page.

When tenant users sign in to the Tenant Manager, they are connecting to an Admin Node.

### Tenant Manager dashboard

After a grid administrator creates a tenant account using the Grid Manager or the Grid Management API, tenant users can sign in to the Tenant Manager.

The Tenant Manager dashboard allows tenant users to monitor storage usage at a glance. The Storage usage panel contains a list of the largest buckets (S3) or containers (Swift) for the tenant. The Space used value is the total amount of object data in the bucket or container. The bar chart represents the relative sizes of these buckets or containers.

The value shown above the bar chart is a sum of the space used for all of the tenant's buckets or containers. If the maximum number of gigabytes, terabytes, or petabytes available for the tenant was specified when the account was created, the amount of quota used and remaining are also shown.

# Dashboard

**16**

**Buckets**

[View buckets](#)

**2**

**Platform services endpoints**

[View endpoints](#)

**0**

**Groups**

[View groups](#)

**1**

**User**

[View users](#)

## Storage usage [?](#)

**6.5 TB of 7.2 TB used**

0.7 TB (10.1%) remaining



| Bucket name     | Space used | Number of objects |
|-----------------|------------|-------------------|
| Bucket-15       | 969.2 GB   | 913,425           |
| Bucket-04       | 937.2 GB   | 576,806           |
| Bucket-13       | 815.2 GB   | 957,389           |
| Bucket-06       | 812.5 GB   | 193,843           |
| Bucket-10       | 473.9 GB   | 583,245           |
| Bucket-03       | 403.2 GB   | 981,226           |
| Bucket-07       | 362.5 GB   | 420,726           |
| Bucket-05       | 294.4 GB   | 785,190           |
| 8 other buckets | 1.4 TB     | 3,007,036         |

## Total objects

**8,418,886**  
objects

## Tenant details [?](#)

Name: Tenant02  
ID: 3341 1240 0546 8283 2208  
✓ Platform services enabled  
✓ Can use own identity source  
✓ S3 Select enabled

## Storage menu (S3)

The Storage menu is provided for S3 tenant accounts only. This menu allows S3 users to manage access keys; create, manage, and delete buckets; manage platform services endpoints; and view any grid federation connections they are permitted to use.

### My access keys

S3 tenant users can manage access keys as follows:

- Users who have the Manage your own S3 credentials permission can create or remove their own S3 access keys.
- Users who have the Root access permission can manage the access keys for the S3 root account, their own account, and all other users. Root access keys also provide full access to the tenant's buckets and objects unless explicitly disabled by a bucket policy.



Managing the access keys for other users takes place from the Access Management menu.

### Buckets

S3 tenant users with the appropriate permissions can perform the following tasks for their buckets:

- Create buckets

- Enable S3 Object Lock for a new bucket (assumes that S3 Object Lock is enabled for the StorageGRID system)
- Update consistency values
- Enable and disable last access time updates
- Enable or suspend object versioning
- Update S3 Object Lock default retention
- Configure cross-origin resource sharing (CORS)
- Delete all objects in a bucket
- Delete empty buckets
- Use the [S3 Console](#) to manage bucket objects

If a grid administrator has enabled the use of platform services for the tenant account, an S3 tenant user with the appropriate permissions can also perform these tasks:

- Configure S3 event notifications, which can be sent to a destination service that supports the Amazon Simple Notification Service.
- Configure CloudMirror replication, which enables the tenant to automatically replicate objects to an external S3 bucket.
- Configure search integration, which sends object metadata to a destination search index whenever an object is created, deleted, or its metadata or tags are updated.

### **Platform services endpoints**

If a grid administrator has enabled the use of platform services for the tenant account, an S3 tenant user with the Manage endpoints permission can configure a destination endpoint for each platform service.

### **Grid federation connections**

If a grid administrator has enabled the use of a grid federation connection for the tenant account, an S3 tenant user who has Root access permission can view the connection name, access the bucket details page for each bucket that has cross-grid replication enabled, and view the most recent error to occur when bucket data was being replicated to the other grid in the connection. See [View grid federation connections](#).

## **Access Management menu**

The Access Management menu allows StorageGRID tenants to import user groups from a federated identity source and assign management permissions. Tenants can also manage local tenant groups and users, unless single sign-on (SSO) is in effect for the entire StorageGRID system.

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