

Explore StorageGRID

StorageGRID 11.7

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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.

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.

torageGRID dashbo	bard					Actio	ons 🗸
You have 4 notifications: 1 0 3 🔺							
Overview Performance Storage	ILM Nodes						
Health status 👩	Data space usage	breakdown 🥹					C
	2.11 MB (0%) of 3.	09 TB used overall					
License							
1	Site name 🗢	Data storage usage	Used space	\$	Total space	\$	
	Data Center 2	0%	682.53 KB		926.62 GB		
License	Data Center 3	0%	646.12 KB		926.62 GB		
License	Data Center 1	0%	779.21 KB		1.24 TB		
Total objects in the grid 🥥	Metadata allowed	d space usage breakdo	wn o				Ľ
	3.62 MB (0%) of 25	5.76 GB used in Data Ce	nter 1				
0	Data Center 1 has th the grid.	e highest metadata space i	usage and it detern	nines the	metadata space av	/ailable	in
	Site name 🗢	Metadata space usage	Used space	¢	Allowed space	¢	^
	Data Center 3	0%	2.71 MB		19.32 GB		~

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

Learn more

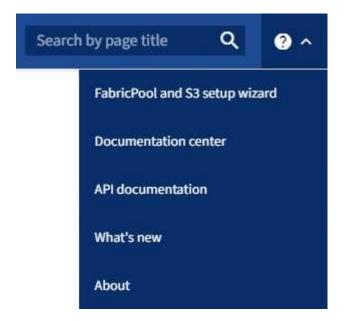
• View and configure the dashboard

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, and the API documentation. You can also determine which version of StorageGRID is currently installed.



Learn more

- Use FabricPool setup wizard
- Use S3 setup wizard
- Use the Grid Management API

Alerts menu

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

DASHBOARD	
ALERTS 🥝	^
Current	
Resolved	
Silences	
Rules	
Email setup	
NODES	

From the Alerts menu, you can do the following:

- · 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

Learn more

Manage alerts

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.

DASHBOARD	Nodes				
ALERTS 🤗 🔨		2011 - 2015 - 64			
Resolved	View the list and status of sites	and grid nodes.			
Silences	Search	Q			Total node count: 14
Rules	Name 😧 💠	Туре 💠	Object data used 🥝 🝦	Object metadata used 🧿 💠	CPU usage 😮 💠
Email setup					
NODES	StorageGRID Deployment	Grid	0%	0%	
TENANTS	▲ Data Center 1	Site	0%	0%	-
ILM V	Ø DC1-ADM1	Primary Admin Node		-	21%
MAINTENANCE	OC1-ARC1	Archive Node	-		8%
SUPPORT	🕑 DC1-G1	Gateway Node		-	10%
	Ø DC1-S1	Storage Node	0%	0%	29%

Learn more

• View the Nodes page

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.

DASHBOARD								
alerts 🥝 🗸 🗸	Tenants							
NODES	View information for each	tenant account. Depending o	on the timing of ingests, ne	twork connec	tivity, and node	status, the usage da	a shown m	ight be out of date.
TENANTS	To view more recent value	s, select the tenant name.			67.5	101 102		
ILM ~	Create Export to CSV	Actions 🗸 Search te	nants by name or ID		Q			Displaying 2 results
CONFIGURATION	Name 🥥 💠	Logical space used 🥝 🍦	Quota utilization 🍘 🍦		Quota 👔 韋	Object count 🔞	🔷 Sign i	n/Copy URL 👩
MAINTENANCE								
SUPPORT	S3 Tenant	0 bytes		0%	100.00 GB	0	→	ſ
	Swift Tenant	0 bytes		0%	100.00 GB	0	→]	
							← Previ	ous 1 Next $ ightarrow$

Learn more

- Manage tenants
- Use a tenant account

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.

DASHBOARD
ALERTS 🥝 🗸 🗸
NODES
TENANTS
ILM ^
Rules
Policies
Storage pools
Erasure coding
Storage grades
Regions
Object metadata lookup
CONFIGURATION

Learn more

- Use information lifecycle management
- Manage objects with ILM

Configuration menu

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

Configuration

Configure your StorageGRID system.

Network	Security	System	Monitoring	Access control
High availability groups	Certificates	Grid federation	Audit and syslog server	Admin groups
Load balancer endpoints	Firewall control	Object compression	SNMP agent	Admin users
S3 endpoint domain	Key management server	S3 Object Lock		Grid passwords
names	Security settings	Storage options		Identity federation
Traffic classification	Proxy settings			Single sign-on
VLAN interfaces				

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 the browser inactivity timeout.
- 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.

Maintenand	Ce	
Perform maintenance procedures of	n your StorageGRID system.	
Tasks	System	Network
Decommission	License	DNS servers
Expansion	Recovery package	Grid Network
Recovery	Software update	NTP servers
Rename grid, sites, or nodes		
Object existence check		
Volume restoration		

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
- 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.

Support		
If a problem occurs, use Suppo	rt options to help technical supp	ort analyze and troubleshoot your system.
Tools	Alarms (legacy)	Other
AutoSupport	Current alarms	Link cost
Diagnostics	Historical alarms	NMS entities
Grid topology	Custom events	
Logs	Global alarms	
Metrics	Legacy email setup	

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, and set up email notifications for legacy alarms. See Manage alarms (legacy system).



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

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.

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.

Buckets	 Platform ser 	vices Groups	 User
6 Buckets View buckets	2 Platform ser endpoints View endpoint	U View groups	View users
Storage usage 💈			Total objects
6.5 TB of 7.2 TB used		0.7 TB (10.1%) remaining	
			8,418,886
			objects
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	Tenant details 🧕
Bucket-06	812.5 GB	193,843	Numerica Terration
Bucket-10	473.9 GB	583,245	Name: Tenant02
Bucket-03	403.2 GB	981,226	 3341 1240 0546 8283 2208 Platform services enabled
Bucket-07	362.5 GB	420,726	Can use own identity source
Bucket-05	294.4 GB	785,190	S3 Select enabled
8 other buckets	1.4 TB	3,007,036	~

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 level settings
- 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 experimental 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™ (Amazon SNS).
- 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.



Related information

• Use a tenant account

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