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enabling multi-tenancy in cohesity 6.1
revision 0.2

synopsis

The following is a simple document providing visual guidance on the process required to enable multi-tenancy on the Cohesity DataPlatform. This guide assumes you've got some familiarity with the Cohesity platform, including concepts such as Storage Domains, Organizations, Views, Users and the Cohesity DataPlatform user interface. I've obfuscated the serial numbers and IP addresses used in this example.

More information about Cohesity can be found here - <https://www.cohesity.com>.

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overview

The process to enable logical multi-tenancy on the Cohesity DataPlatform is fairly simple. You turn on organizations in the cluster and then assign users, roles and resources to those organizations.

prerequisites

There are a few things to consider when enabling multi-tenancy on a Cohesity cluster.

- Note that enabling multi-tenancy for a cluster cannot not be undone. Organizations cannot be deleted from the cluster, but they can be deactivated.
- If you are using replication, and either the sending or receiving cluster is multi-tenant enabled, both Clusters must be running version 6.1 or later. Note also that Storage Domain pairing must be configured on both clusters. One or both Clusters can be multi-tenant enabled, but there is no requirement for everything to be multi-tenanted.
- Do not use the same user name for both an organization user and a regular cluster user as it might prevent one of the users from logging in to the Cluster.

process

enable organizations

In the Cohesity Dashboard, select Admin > Cluster Settings.

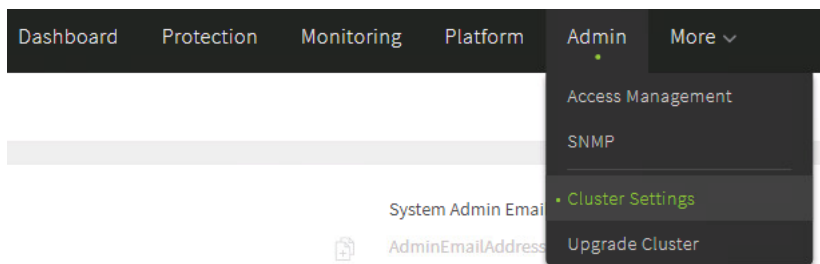


Figure 1 - Admin - Cluster Settings

On this screen you can toggle the Enable Organizations option.

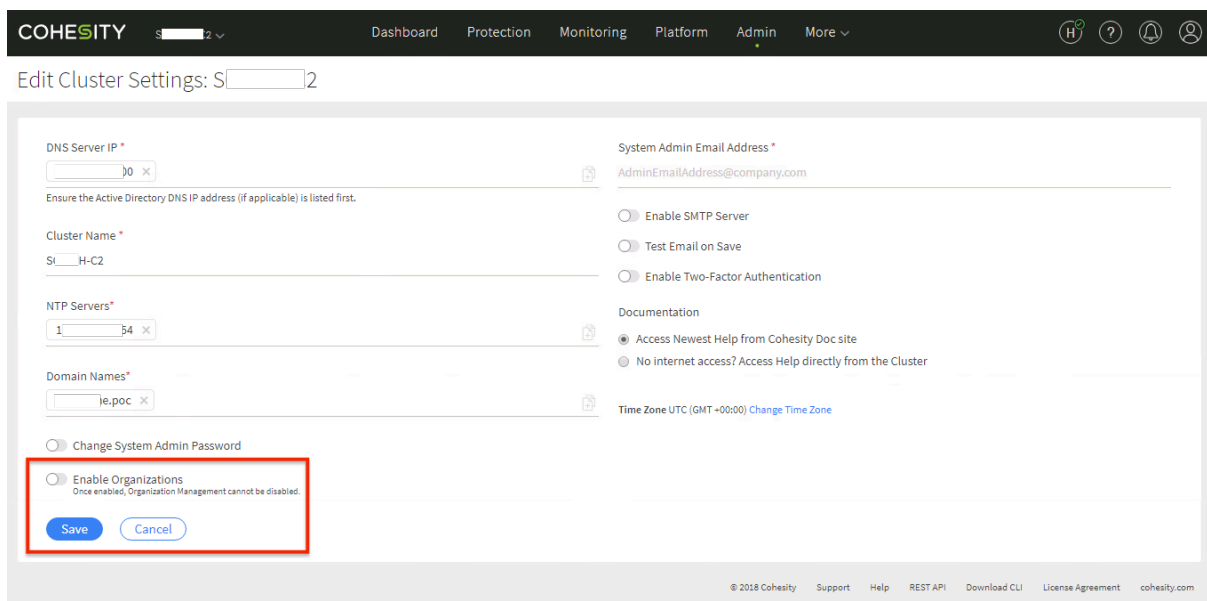


Figure 2 - Enable Organizations

Once you've toggled the Enable Organizations option, you'll have the option to allow multiple organizations to use on Storage Domain. You would do this to reduce storage consumption in the cluster by providing Cohesity deduplication across all the organizations using the Storage Domain (as Cohesity deduplication is configured on a per Storage Domain basis). Organizations are still logically isolated from other organizations whether this option is on or off. You might not want to do this if tenants are sensitive about storing data adjacent to other organizations. In that scenario, it's more likely those tenants would have their own dedicated environment.

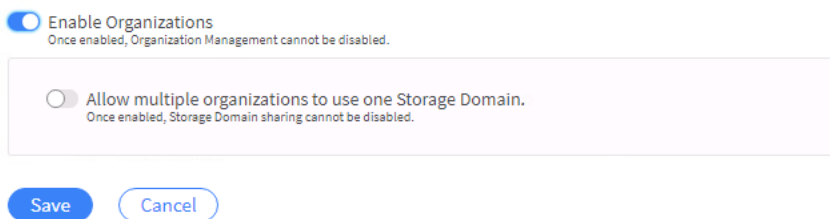


Figure 3 - Allow Multiple Organizations To Use One Storage Domain

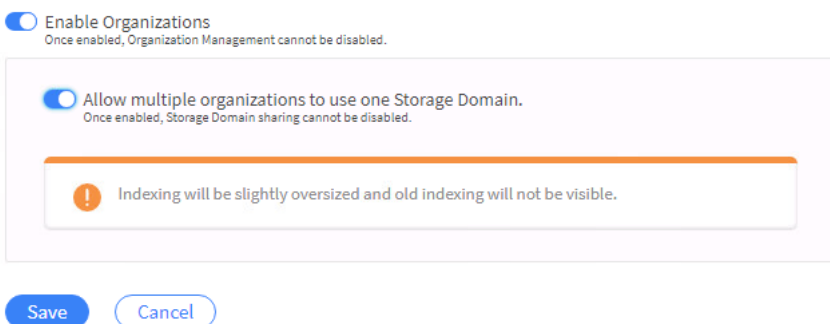


Figure 4 - Click Save

Click Save to finish enabling organizations.

add an organization

Once you have organizations enabled, the next step is to add an organization. In the Cohesity Dashboard, select Admin > Organizations.

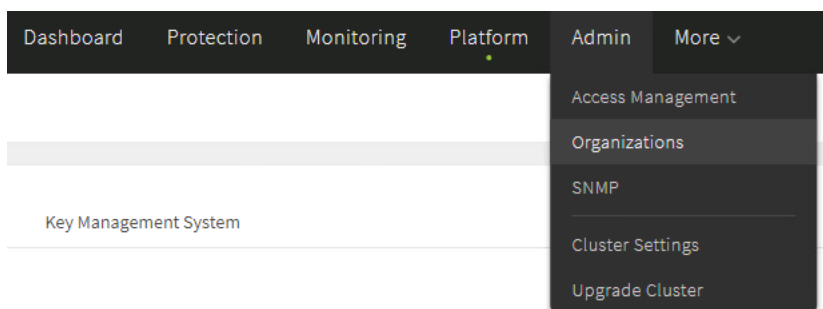


Figure 5 - Admin - Organizations

Click on Add Organization to add an organization.

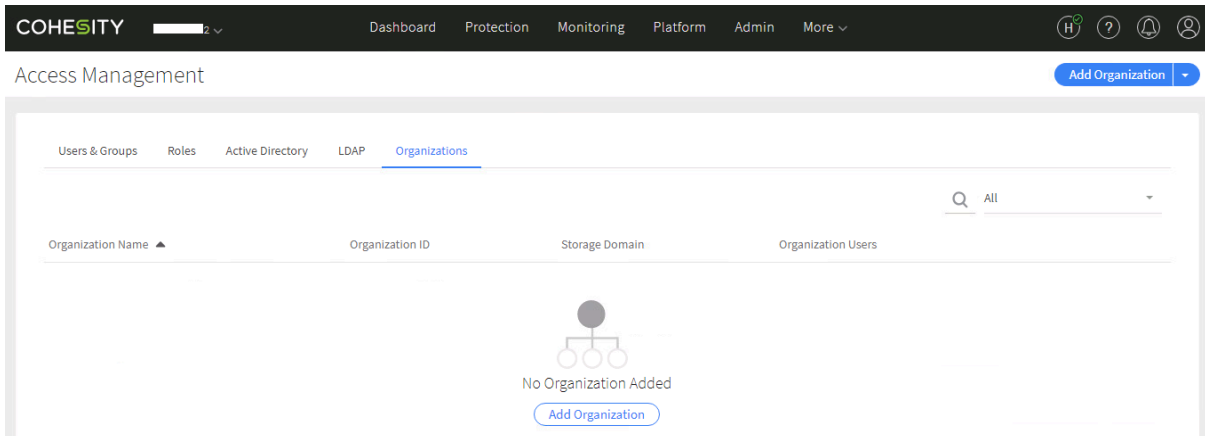


Figure 6 - Add Organization

You'll need to provide the following information:

- **Organization Name:** The name of the organization. The name can be edited later.
- **Organization ID:** An identifier, up to eight alphanumeric characters, which is used as the suffix for all user names in the organization. For example, if you enter the ID *testorg1*, user jeremiah would log in to the cluster with the user name *jeremiah@testorg1*. Note that the Organization ID cannot be edited later.
- **Description:** An optional description of the organization. This can be edited later.

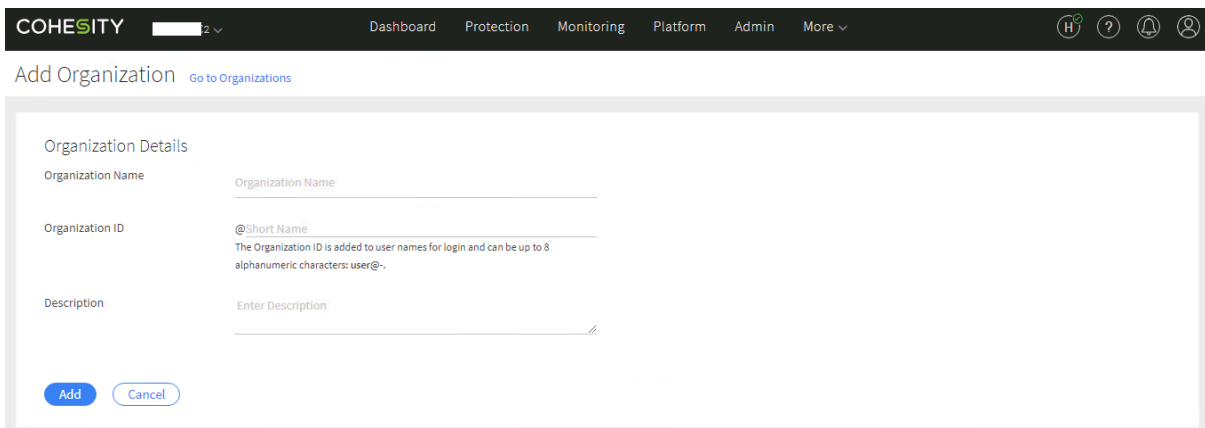


Figure 7 - Organization Details (1)

Once you've added the required information, click on Add to finish.

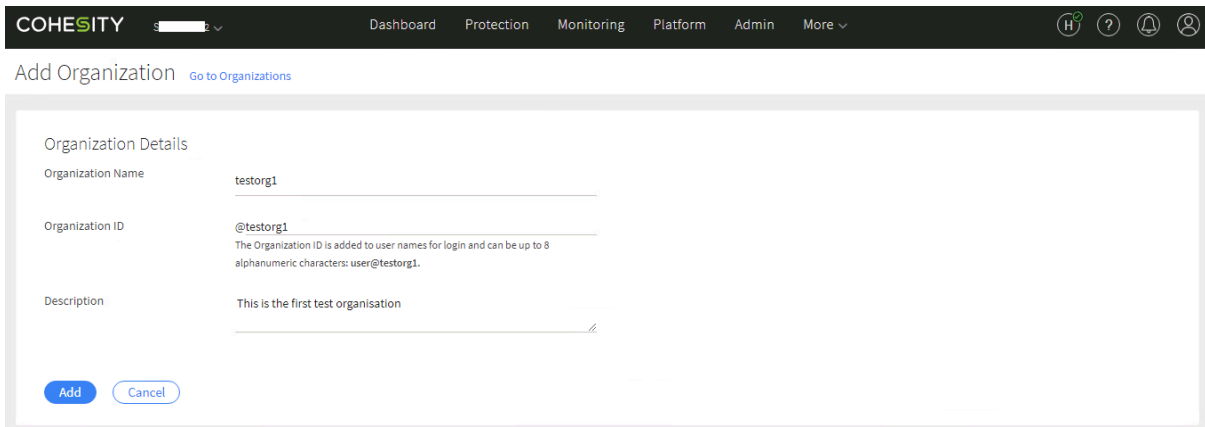


Figure 8 - Organization Details (2)

You'll receive a thumbs up sign from the Data Platform that everything has gone to plan.

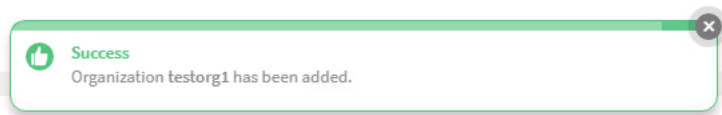


Figure 9 - Add Organization - Success

Click on Edit Organization to show the following options:

- Storage Domains: You can select one or more Storage Domains from the list or create a new one. Note that you need to assign at least one Storage Domain to the organization.
- Views: You can select an existing View or create a new one.

Edit Organization [Go to Organizations](#)

A screenshot of the 'Edit Organization' form. The form is titled 'Organization Details' and contains several fields: 'Organization Name' with the value 'testorg1', 'Organization ID' with the value '@testorg1', and 'Description' with the value 'This is the first test organisation'. There are two dropdown menus: 'Storage Domains' with the value 'Select...' and 'Views' with the value 'Select Views'. Below each dropdown menu is a note: 'Once assigned, Storage Domains cannot be unassigned.' and 'Once assigned, Views cannot be unassigned.' respectively.

Figure 10 - Edit Organization (1)

Other options that can be changed include:

- Users;
- Sources;
- Policies and Protection Jobs; and
- Network Segments.

Users

[+ Assign Users](#)

Sources

[+ Assign Objects](#)

Policies and Protection Jobs

[+ Assign Policies And Protection Jobs](#)

Network Segments

VLANs

[+ Assign VLANs](#)

Save

Cancel

Figure 11 - Edit Organization (2)

The organization can also create their own Views after they log in to the Cluster. The great thing about this workflow is that you can add objects, such as Views, from within the workflow, rather than having to exit the workflow and configure the object separately.

Edit Organization [Go to Organizations](#)

The screenshot shows the 'Edit Organization' form with the following details:

- Organization Name:** testorg1
- Organization ID:** @testorg1
- Description:** This is the first test organisation
- Storage Domains:** DefaultIdViewBox (dropdown menu)
- Views:** Select Views (dropdown menu) with an **+ Add View** button visible in the dropdown list.

Below the 'Views' section, there are buttons for **+ Assign Users** and **+ Assign Objects**.

Figure 12 - Edit Organization - Add View

To create a new View, click on Add View. Provide a name and assign it to a Storage Domain. If you want to override deduplication and compression, now's your chance.

New View: [+ Description](#)

Storage Domain*
DefaultIddViewBox

The Storage Domain you selected has Inline Deduplication enabled. You can override that policy for this View.

Override the Storage Domain policy and disable Inline Deduplication and Compression

QoS Policy
Backup Target Low

[Show Advanced Settings](#)

[Create View](#) [Cancel](#)

Figure 13 - Edit Organization - New View

Click on Show Advanced Settings to configure protocols, SMB options, and permissions on the View.

[Hide Advanced Settings](#)

View Protocol

All NFS only SMB only S3 only

Note that S3 is read-only. View created with this option cannot be modified to S3-only.

SMB Options

Shares are Browsable
If not enabled, then Shares in this View will be hidden.

Access Based Enumeration for SMB

Owner

All Domains Administrators

Permissions

Principal	Type	Applies To	Permissions	
Everyone	Allow	This folder, subfolders, and files	Full Control	<input type="button" value="Delete"/>
telstrabne.poc	<input type="text" value="Search AD Users..."/>	<input type="text" value="Select"/>	<input type="text" value="Select"/>	<input type="button" value="Add"/>

Figure 14 - New View - Advanced Settings (1)

You can also set quotas and override the global whitelist if required.

Security Style

Unified Mode (Map Permissions Across Protocols)
Windows and Linux permissions are kept consistent such that when one is changed, the other is modified automatically.

File System

Case Insensitive File/Folder Names
Once the View is created this option is not editable.

File Filtering

File DataLock

Quota and Alert

Inherit from Storage Domain Override

View Logical Quota: - Alert on Threshold: -

Whitelist

Override Global Whitelist

[Create View](#) [Cancel](#)





Figure 15 - New View - Advanced Settings (2)

users

When configuring the organization, you'll want to assign users, and restrict access to specific objects. You can search for users or create new ones. Users can be added and removed later.

Assign Users ×

Search

Name	Domain	Email	Roles	Date	
 admin	LOCAL	dan.frith@[redacted].com	Admin	Apr 3, 2018 1:07pm	
 dan.frith@[redacted].com	helios	dan.frith@[redacted].com	Admin	Nov 14, 2018 10:11am	

[+ Add User](#)

Once assigned, Users can login with username: `username@testorg1`.

[Assign](#) [Cancel](#)

Figure 16 - Assign Users

When you add a user, they can either be local or a member of a specific Active Directory.

Add a Local User or AD Principal

Type

Local User Active Directory Users & Groups

* Username

* Email Address

* Password

Password must be at least 8 characters

* Confirm Password

* Roles

Restrict access to specific Objects

Add

Cancel

Figure 17 - Add User (Local)

Add a Local User or AD Principal

Type

Local User Active Directory Users & Groups

* Active Directory Domain

* User(s) or Group(s)

* Roles

Restrict access to specific Objects

Description

Add

Cancel

Figure 18 - Add User (Active Directory)

Note that you can assign specific Roles to the user, such as Admin or Operator.

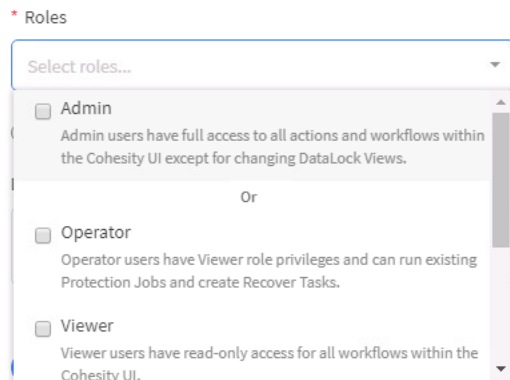


Figure 19 - Roles

sources

You can select the Sources to assign *exclusively* to the organization. Organizations can also register their own Sources after they log in to the Cluster.

final steps


You'll also want to configure:

- Policies and Protection Jobs: Select the Policies the organization can use when creating Protection Jobs. Policies can be added and removed later. Note that Policies are not assigned to an Organization by default.
- VLANs: Isolate network traffic for the organization with VLAN IDs. VLANs can be added and removed later. Using VLANs is optional but recommended.

Click Save to complete the configuration.

deactivate an organization

You can deactivate an organization (but this does not delete it from the cluster).

- Select Admin > Organizations.
- Click the icon () for the organization and select Deactivate.
- Respond to the prompt.

You can reactivate an organization at a later date and it will be business as usual.