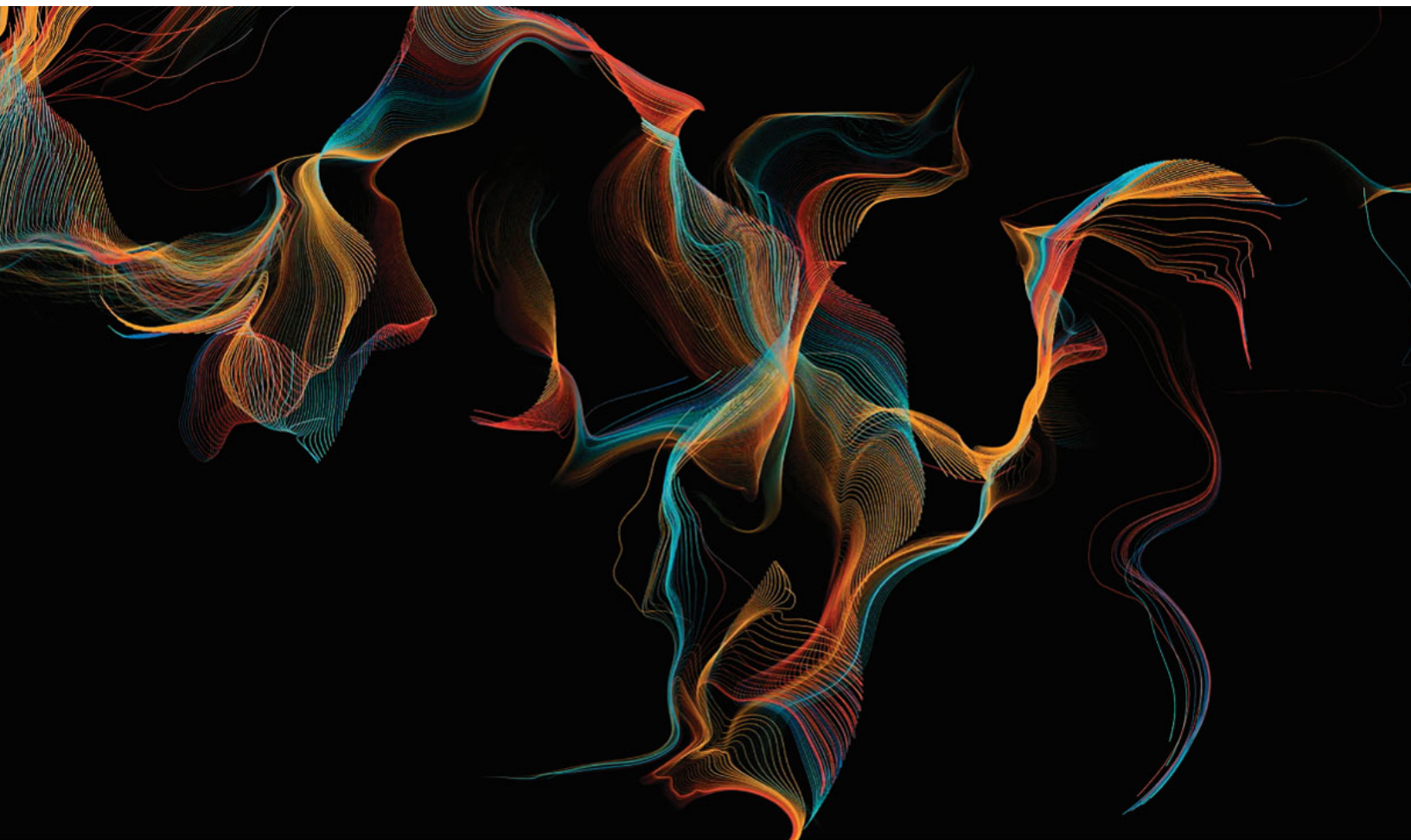




ActiveScale View User Guide

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One MB is equal to one million bytes, one GB is equal to one billion bytes, one TB equals 1,000GB (one trillion bytes) and one PB equals 1,000TB when referring to storage capacity. Usable capacity will vary from the raw capacity due to object storage methodologies and other factors.

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1 About this document

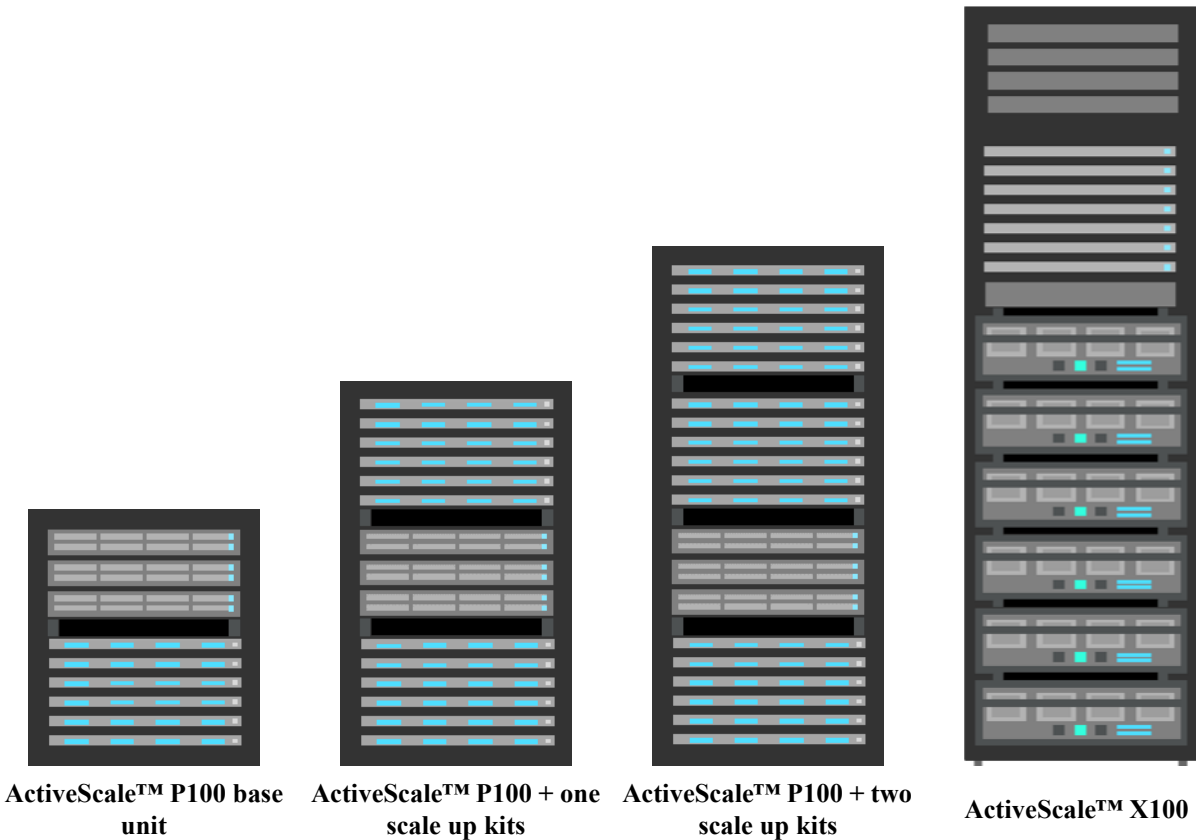
This is the user guide for ActiveScale™ View, a console which S3 account owners and system administrators (on behalf of S3 account owners) can use to manage buckets, S3 users, and access keys.

System administrators have limited management capabilities on behalf of S3 account owners:

- They cannot delete buckets.
- They cannot see objects within a bucket.
- They cannot set public or user permissions on buckets.
- They cannot manage the lifecycle of objects in a bucket.

Supported hardware

This document supports the following hardware:



Revision history

Date	Revision	Description
December 2019	3.3	ActiveScale OS 5.5.2
October 2019	3.2	ActiveScale OS 5.5.1 Critical Events
February 2019	3.1	ActiveScale OS 5.5 documentation updates
January 2019	3.0	ActiveScale OS 5.4.1 Patch 1
December 2018	2.8	ActiveScale OS 5.4.1
November 2018	2.7	ActiveScale OS 5.4 documentation update
November 2018	2.6	ActiveScale OS 5.3.0.1
November 2018	2.5	ActiveScale OS 5.4
August 2018	2.4	ActiveScale OS 5.3 documentation update
May 2018	2.3	ActiveScale OS 5.3
May 2018	2.2	ActiveScale OS 5.2.0.39
April 2018	2.1	ActiveScale OS 5.2 documentation update
February 2018	2.0	ActiveScale OS 5.2
September 2017	1.9	ActiveScale OS 5.1
August 2017	1.8	ActiveScale OS 5.0.1.20
April 2017	1.7	ActiveScale OS 5.0.2
April 2017	1.6	ActiveScale OS 5.0.1 documentation update
February 2017	1.2	ActiveScale OS 5.0.1
January 2017	1.1	ActiveScale OS 5.0 documentation update
December 2016	1.0	ActiveScale OS 5.0
November 2016	N/A	ActiveScale OS 5.0 early access

2 Overview

Topics

- [Log into ActiveScale View](#) on page 7
- [Log into ActiveScale SM](#) on page 7
- [Log out of ActiveScale View](#) on page 9
- [View/change account settings](#) on page 9

2.1 Log into ActiveScale View

This section provides instructions on how S3 account owners and administrators log into the ActiveScale SM.

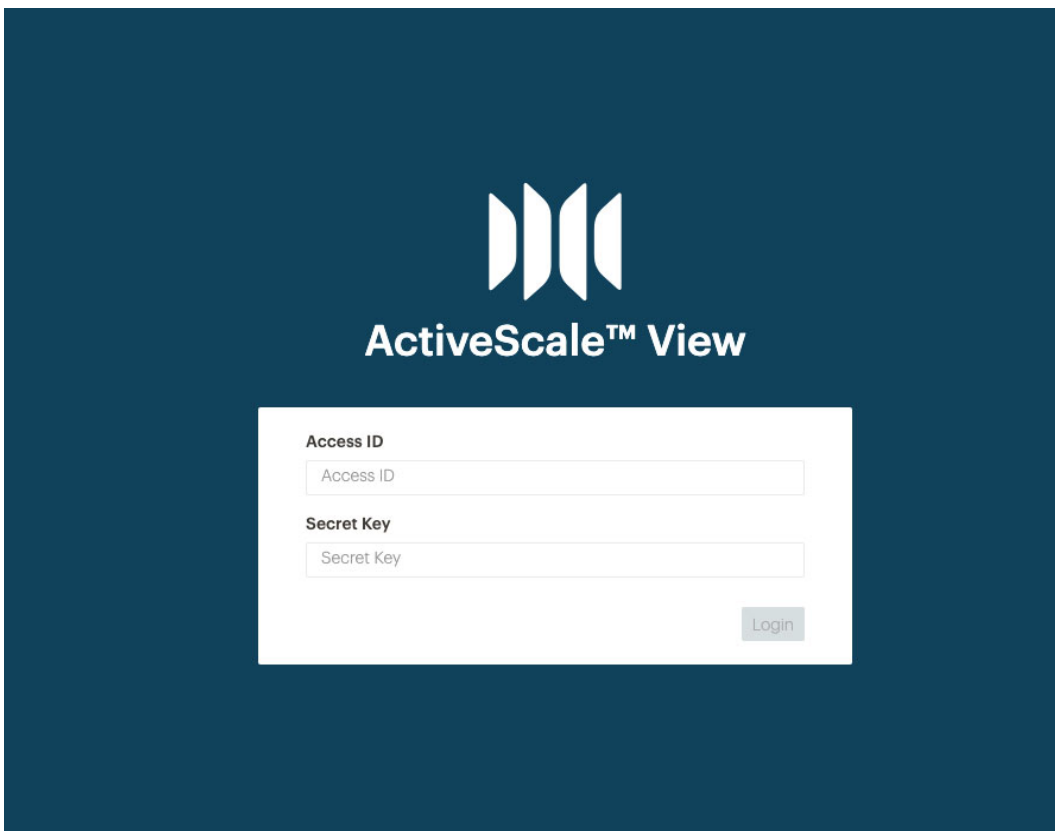
2.1.1 S3 account owners log into ActiveScale View

1. Using a desktop web browser, navigate to the public IP address and web interface port of any System. Node. For example, `https://System Node3_PublicNetworkIP:10443`. For more information, see the ActiveScale OS Administrator Guide.

2.2 Log into ActiveScale SM

1. The ActiveScale View login page appears.

Figure 2-1. ActiveScale View Login Page



2. Log in with access key as Access ID and secret key as Secret Key. The access key and secret key are provided in an email associated with S3 account owner. Refer to ActiveScale OS Administrator Guide section [Create API keys](#) on page 131.

2.2.1 Administrators Log Into ActiveScale View

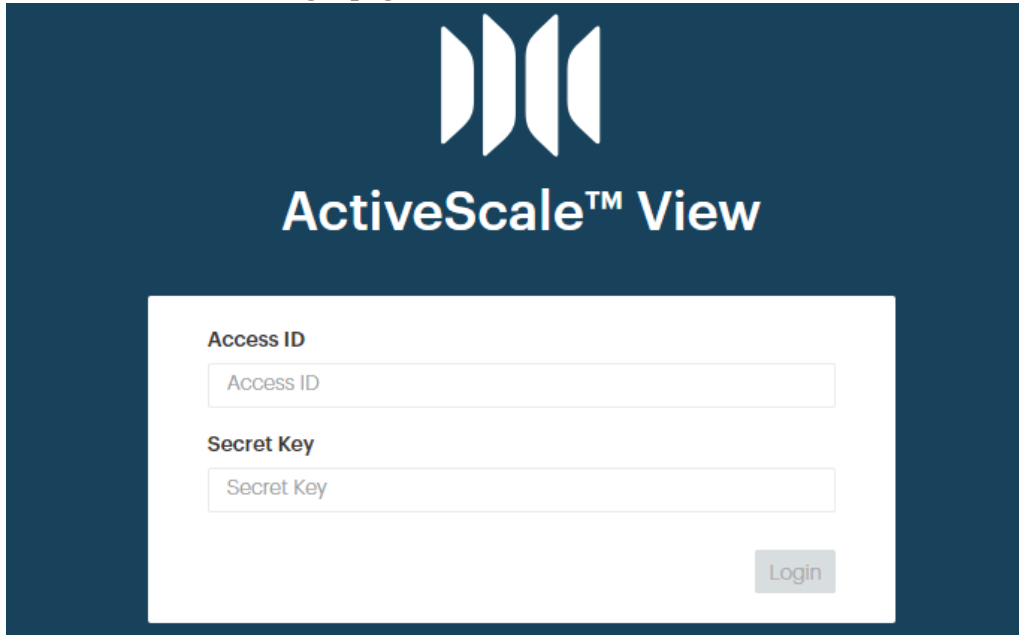
To access ActiveScale View, you need to know the public IP address of your ActiveScale system (*PublicNetworkIP*).

1. Using a desktop web browser, navigate to `https://PublicNetworkIP:10443/amlogin`.

Note: ActiveScale View is compatible with Chrome v63-65 and Firefox v57-59. Desktop versions only.

The ActiveScale View login page appears.

Figure 2-2. ActiveScale View login page

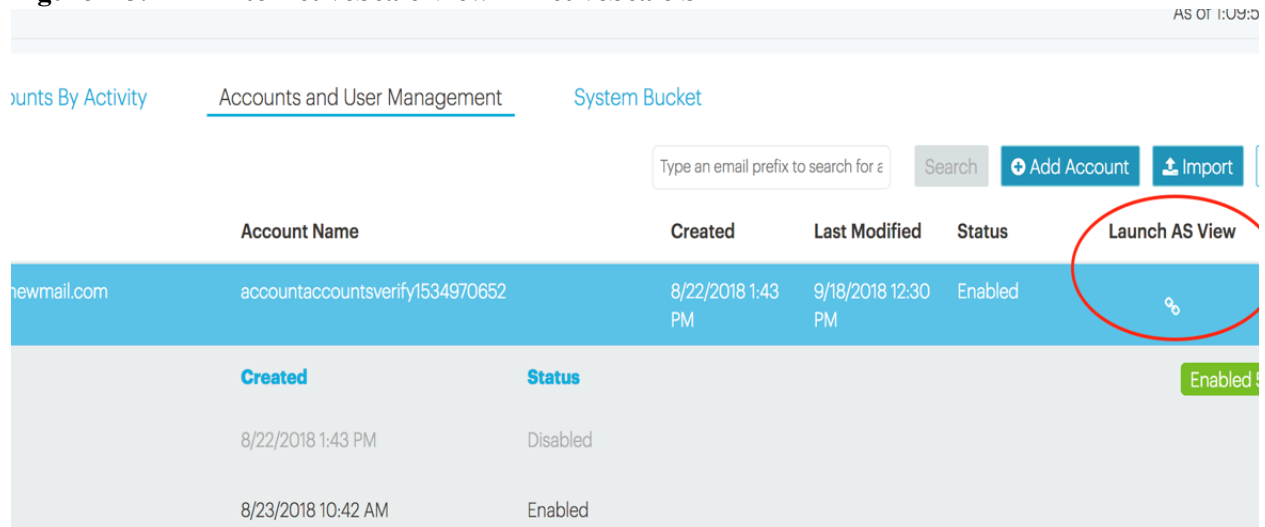


2. Enter your access ID and secret key, and click **Login**.

The **Buckets** page displays and you are now logged into ActiveScale View.

System administrators log into ActiveScale View on behalf of an S3 account owner through ActiveScale SM.

Figure 2-3. Link to ActiveScale View in ActiveScale SM



1. In ActiveScale SM, click **Object Storage > Accounts and User Management**.
2. On the row corresponding to the target S3 account, click the link icon in its **Launch AS View** column.
The **Buckets** page displays and you are now logged into ActiveScale View.

2.3 Log out of ActiveScale View

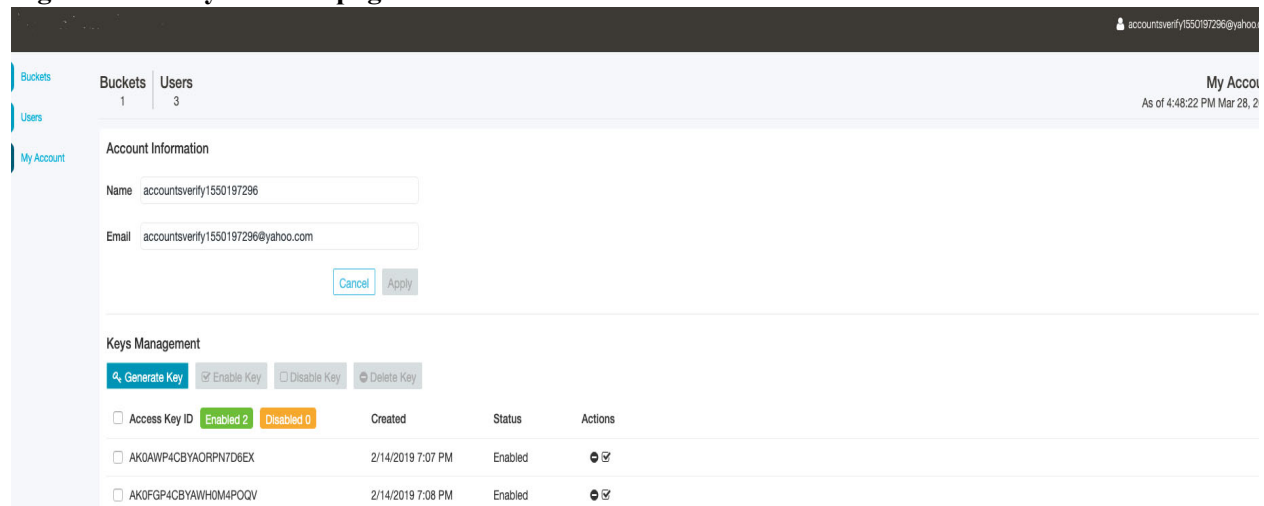
Logging out of ActiveScale SM doesn't log you out of ActiveScale View; you still need to log out of ActiveScale View by following these steps.

1. Click your email address in the right corner of the tool bar.
The **Logout** menu displays.
2. Click **Logout**.
You are now logged out of ActiveScale View.

2.4 View/change account settings

1. In the navigation bar, click **My Account**.
2. On the **My Account** page, you can generate, enable, disable, or delete access keys for your account. You can also change your user name and email address. This allows you to create multiple ActiveScale View login credentials and/or personas for yourself.

Figure 2-4. My Account page



The screenshot shows the 'My Account' page in ActiveScale View. The top navigation bar includes 'Buckets' (1) and 'Users' (3). The user's email address, 'accountsverify1550197296@yahoo.com', is displayed in the top right corner. The page is divided into two main sections: 'Account Information' and 'Keys Management'.

Account Information: This section contains two input fields: 'Name' (accountsverify1550197296) and 'Email' (accountsverify1550197296@yahoo.com). Below these fields are 'Cancel' and 'Apply' buttons.

Keys Management: This section features a 'Generate Key' button and three status buttons: 'Enable Key', 'Disable Key', and 'Delete Key'. Below these buttons is a table listing access keys.

Access Key ID	Enabled 2	Disabled 0	Created	Status	Actions
AK0AWP4CBYAORPN7D6EX			2/14/2019 7:07 PM	Enabled	⊙ ☒
AK0FGP4CBYAWHOM4POQV			2/14/2019 7:08 PM	Enabled	⊙ ☒

3 Managing buckets

3.1 Topics

- [Topics](#) on page 10
- [Create a bucket](#) on page 11
- [Delete a bucket](#) on page 11
- [List buckets](#) on page 12
- [Manage bucket properties](#) on page 12
- [View bucket properties](#) on page 20

3.2 Create a bucket

1. In the navigation bar, click **Buckets**.
2. On the **Buckets** page, click **Create Bucket**.
3. In the **Create New Bucket** dialog box, type a name for the new bucket.

Note: A bucket name must be between 3 and 63 characters long and can contain lowercase letters, numbers, periods, and hyphens.

Adjacent labels (groups of characters) must be separated by a single period (.) or a single hyphen (-).

Each label must start and end with a lowercase letter or a number.

The bucket name cannot contain underscores, end with a hyphen, have consecutive periods, or use hyphens adjacent to periods.

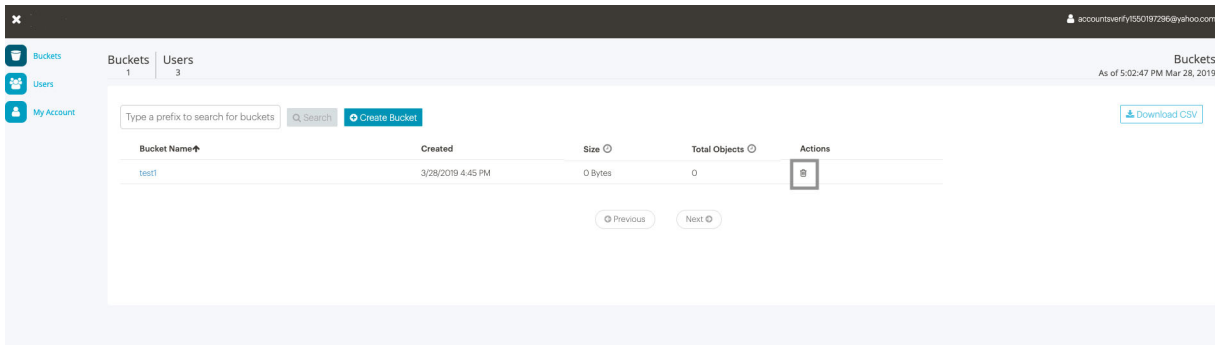
Bucket names must not be formatted in the form of an IP address (for example, 192.168.5.4).

4. Click **Create**.
5. To confirm, click **Create** again.

3.3 Delete a bucket

1. In the navigation bar, click **Buckets**.
2. On the **Buckets** page, click the delete bucket icon under the **Actions** column.

Figure 3-1. Delete Bucket Dialog Box



3. In the delete bucket dialog box, type Bucket Name to confirm deletion.
4. Click delete.

3.4 List buckets

Figure 3-2. The Buckets page

The screenshot shows the 'Buckets' page in the ActiveScale interface. The navigation bar on the left includes 'Buckets', 'Users', and 'My Account'. The main content area has a search box with the placeholder text 'Type a prefix to search for buckets', a 'Search' button, and a 'Create Bucket' button. A 'Download CSV' button is also present. The table below lists seven buckets, each with a name, creation time, capacity, and total objects.

Bucket Name	Created	Capacity	Total Objects	Actions
testbucket1	8/15/2018 3:56 PM	0 Bytes	0	
testbucket2	8/15/2018 4:05 PM	0 Bytes	0	
testbucket3	8/15/2018 4:06 PM	0 Bytes	0	
testbucket4	8/15/2018 4:06 PM	0 Bytes	0	
testbucket5	8/15/2018 4:06 PM	0 Bytes	0	
testbucket6	8/15/2018 4:06 PM	0 Bytes	0	
testbucket7	8/15/2018 4:06 PM	0 Bytes	0	

1. In the navigation bar, click **Buckets**.
2. (Optional) In the search box, type the first few characters of the bucket name, and click **Search**.

Note: This interface can only search for the prefix of a bucket name.

3. (Optional) Sort the list by the **Bucket Name** or **Created** column.
4. Use the **Next/Previous** button to page down/up the list.

Tip: To refresh the list, click **Search** again.

Note: The system updates the **Capacity** and **Total Objects** metrics at random time intervals. Hover over the clock icon beside these metrics to see when they were last updated.

5. To download a report, click **Download**.

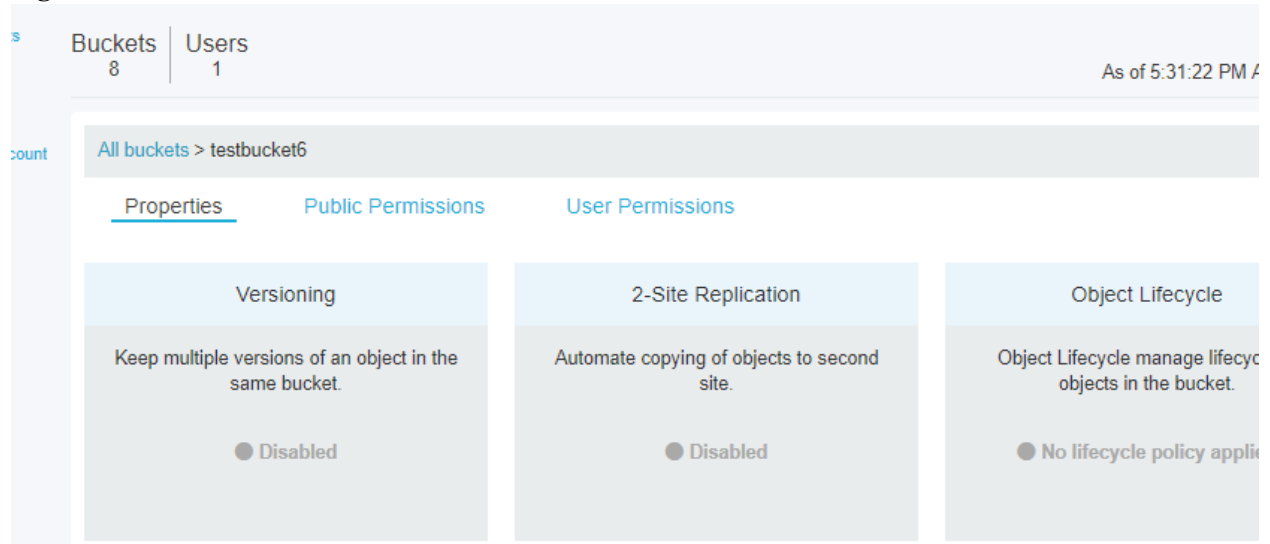
3.5 Manage bucket properties

System administrators have limited management capabilities on behalf of S3 account owners:

- They can view a bucket's public or user permissions, but cannot set them.
- They can view a bucket's object lifecycle policies, but cannot change them.

3.5.1 Object lifecycle

Figure 3-3. Bucket details



1. In the navigation bar, click **Buckets**.
2. In the search box, type the first few characters of the bucket name, and click **Search**.
3. (Optional) Sort the list by the **Bucket Name** or **Created** column.
4. Click the bucket's name.
The bucket's details appear.
5. Click the **Properties** sub-tab.
6. In the **Object Lifecycle** panel, click the radio button.
The **Object Lifecycle** dialog box displays.

Note: By default, no policy is set.

3.5.2 Asynchronous replication to a preset destination

When replication is enabled, ActiveScale OS continuously forwards the contents of the *source bucket(s)* to the *destination bucket(s)* through designated S3 accounts (*replication accounts*) on the source and destination systems. The destination bucket can be on another ActiveScale system or on Amazon Web Services (AWS). Replication can be unidirectional or bidirectional. The source and destination buckets must be in separate namespaces, with each namespace at a different site.

Note: ActiveScale OS does **not** replicate content that exists in the source bucket prior to enabling replication.

Caution: The system may not preserve version ordering; an object on the destination system has the same version and timestamp information as that object on the source system. Also, the system might send more than one copy of the same version of an object to the destination system.

Important: ActiveScale can only access one AWS region.

There are differences in replication behavior depending on your replication target as described in the table below.

Table 3-1. Differences in replication pipelines

	ActiveScale-to-ActiveScale	ActiveScale-to-AWS
Version ordering	The pipeline preserves version ordering.	The pipeline does not preserve version ordering. Therefore, when retrieving replicated objects from an AWS destination bucket, always identify the correct version of the object by checking its <code>com.wdc.activescale.versionid</code> attribute against the corresponding attribute of its identical object in the source bucket.
Version and timestamp metadata	An object in the destination bucket has the same version and timestamp information as its identical object in the source bucket.	An object in the destination bucket will not have the same version and timestamp information as its identical object in the source bucket.
Multiple copies of the same version of an object	The pipeline may send more than one copy of the same version of an object to the destination system. However, the destination bucket will have only one copy.	The pipeline may send more than one copy of the same version of an object to the destination system. The destination system thus can have multiple copies of same version, all tagged with same value for <code>com.wdc.activescale.versionid</code> .
DELETE markers	DELETE markers are preserved in correct order.	DELETE markers are replaced with a 0 byte object plus an object tag. Therefore, you may notice objects of size 0 bytes.

Important: Your system administrator has already configured a replication pipeline to your destination system. This pipeline is based on the replication account credentials you specified for the source and destination systems. **Use these same credentials in the steps below** to start forwarding the contents of a source bucket you specify to a destination bucket you specify on your destination system.

1. Configure the destination bucket.

- a. Log into ActiveScale View on your destination system using your replication account credentials.
 - b. If you don't already have a destination bucket, create one. For instructions, see [Create a bucket](#) on page 11. Otherwise, select the bucket from the list on the **Buckets** page.
 - c. If the replication account on the destination system is not the owner of the destination bucket, grant it read and write permissions. For instructions, see [User permissions](#) on page 19.
 - d. Enable versioning on the destination bucket. For instructions, see [Versioning](#) on page 17.
2. Configure the source bucket.
 - a. Log into ActiveScale View on your source system using your replication account credentials.
 - b. If you do not already have a source bucket, create one. For instructions, see [Create a bucket](#) on page 11. Otherwise, select the bucket from the list on the **Buckets** page.
 - c. If the replication account on the source system is not the owner of the source bucket, grant it read and write permissions.
 - d. Select the bucket from the list on the **Buckets** page.
 - e. Click the **Properties** sub-tab.
 - f. In the **2-Site Replication** panel, click the radio button.
 - g. In the **2-Site Replication** dialog box, select the **Enable Replication** check box.
 - h. Type the name of the source bucket in the **Bucket Name** field, and click **Next**.

Figure 3-4. Replication: Selecting a bucket

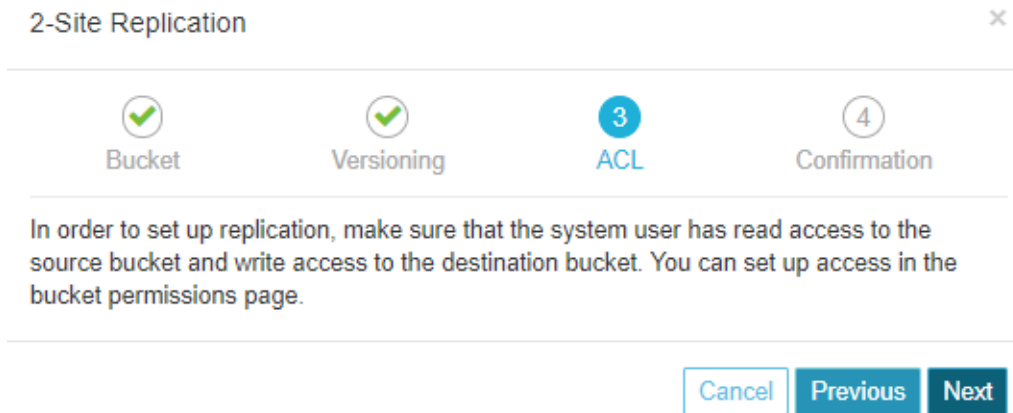
The screenshot shows a dialog box titled "2-Site Replication" with a close button (x) in the top right corner. Below the title bar, there are four numbered steps: 1. Bucket (highlighted in blue), 2. Versioning, 3. ACL, and 4. Confirmation. Below these steps, there is a checked checkbox labeled "Enable Replication". Underneath, there is a text input field labeled "Bucket Name" containing the text "testbucket6". At the bottom right, there are two buttons: "Cancel" and "Next".

ActiveScale View reminds you to enable versioning on the destination bucket. You should have already done this in step 1.

- i. Click **Next**.

ActiveScale View reminds you to set up user permissions (ACLs).

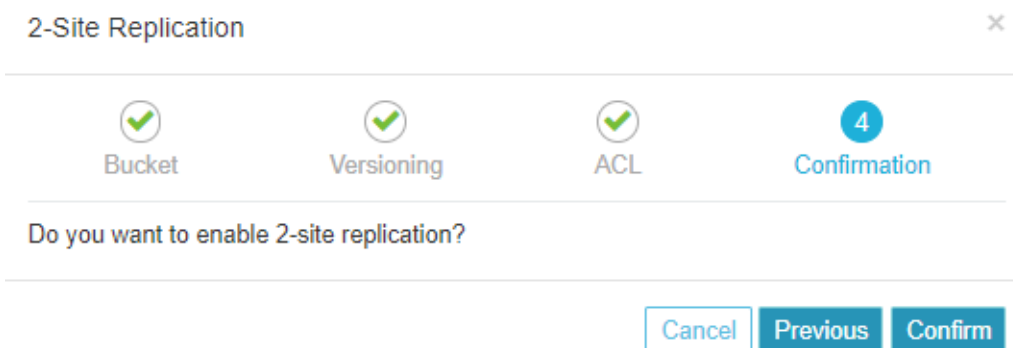
Figure 3-5. Replication: Enabling versioning on the source bucket



- j. Click **Next**.

ActiveScale View asks you to confirm your settings.

Figure 3-6. Replication: Confirming your settings

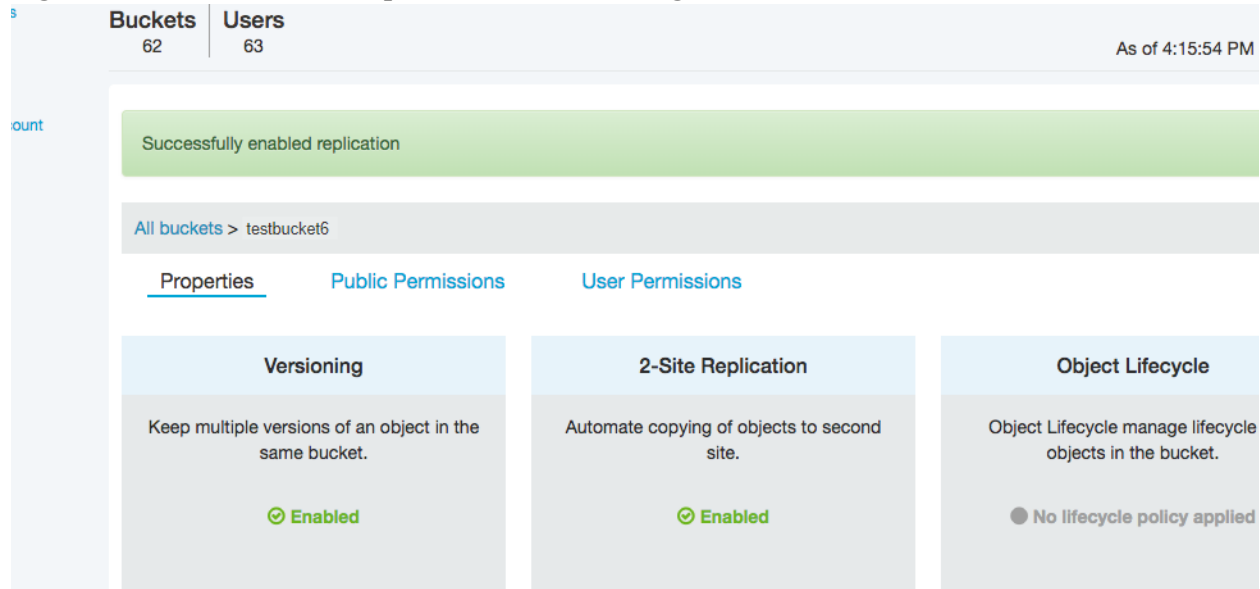


- k. Click **Confirm**.

If replication is successfully enabled on this bucket, the **2-Site Replication** radio button is now green.

Tip: Once replication is enabled, you can disable it any time. However, versioning remains enabled.

Figure 3-7. A bucket with replication and versioning enabled



3.5.3 Versioning

1. In the navigation bar, click **Buckets**.
2. In the search box, type the first few characters of the bucket name, and click **Search**.
3. (Optional) Sort the list by the **Bucket Name** or **Created** column.
4. Click the bucket's name.

The bucket's details appear.

5. Click **Properties**.
6. In the **Versioning** panel, click the radio button.

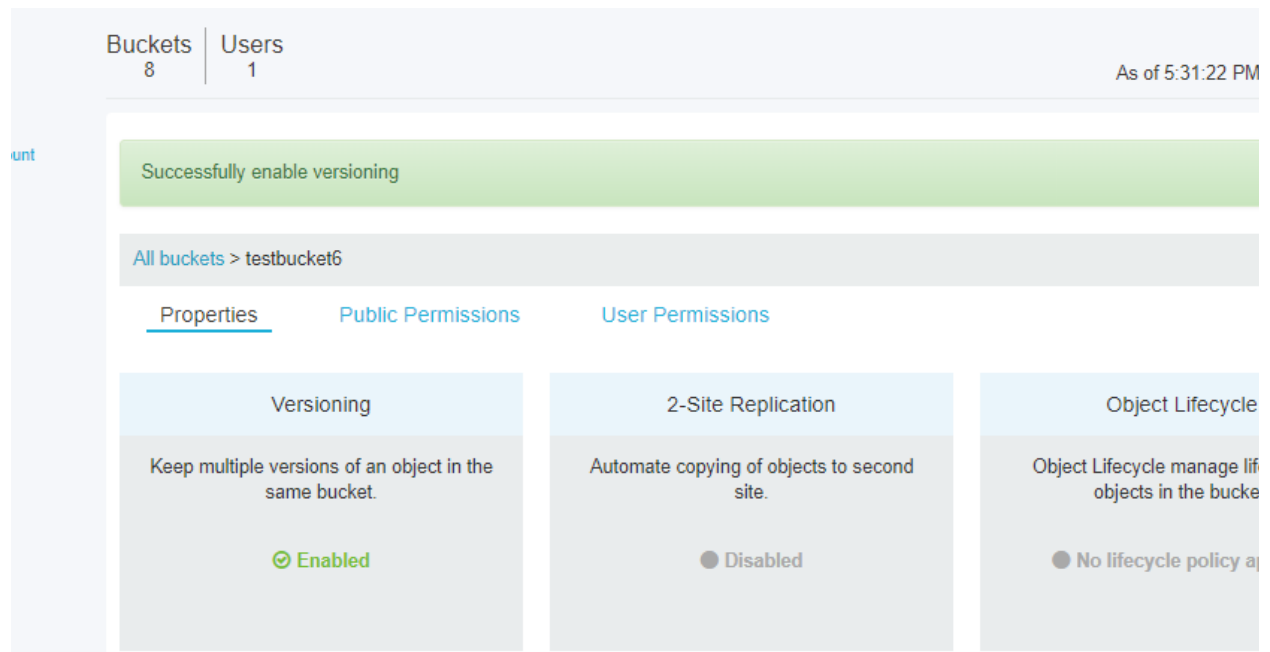
Note: Versioning is disabled by default.

The **Versioning** dialog box displays.

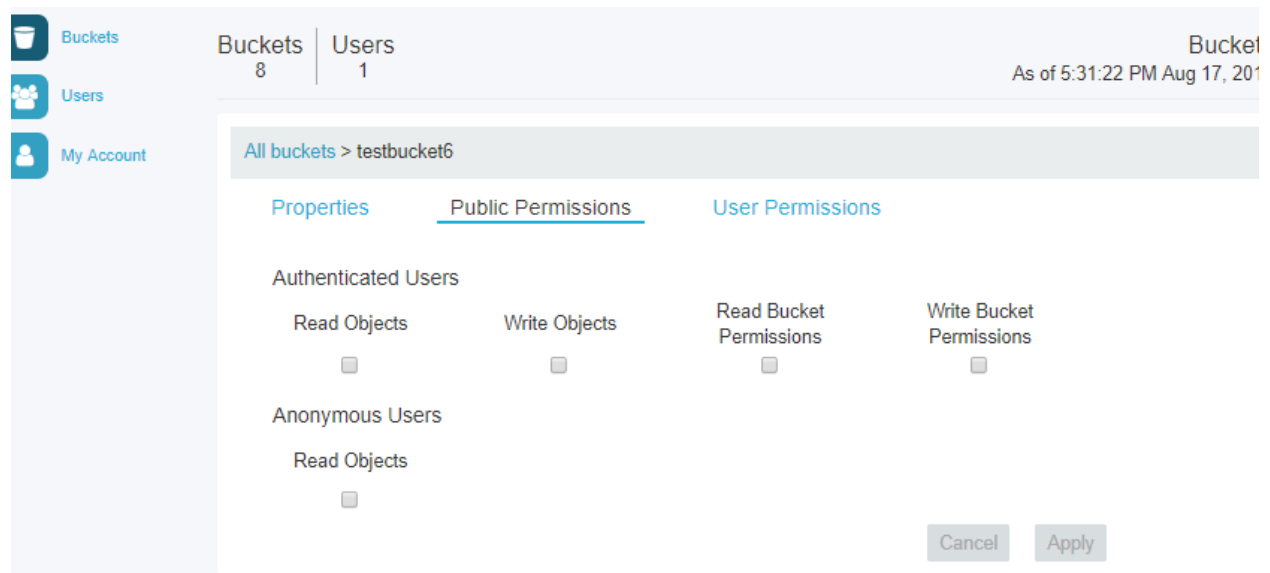
7. In the **Versioning** dialog box, click **Enable**.

If versioning is successfully enabled on this bucket, the **Enabled** radio button is now green.

Tip: Once versioning is enabled you cannot disable it.

Figure 3-8. A bucket with versioning enabled

3.5.4 Public permissions

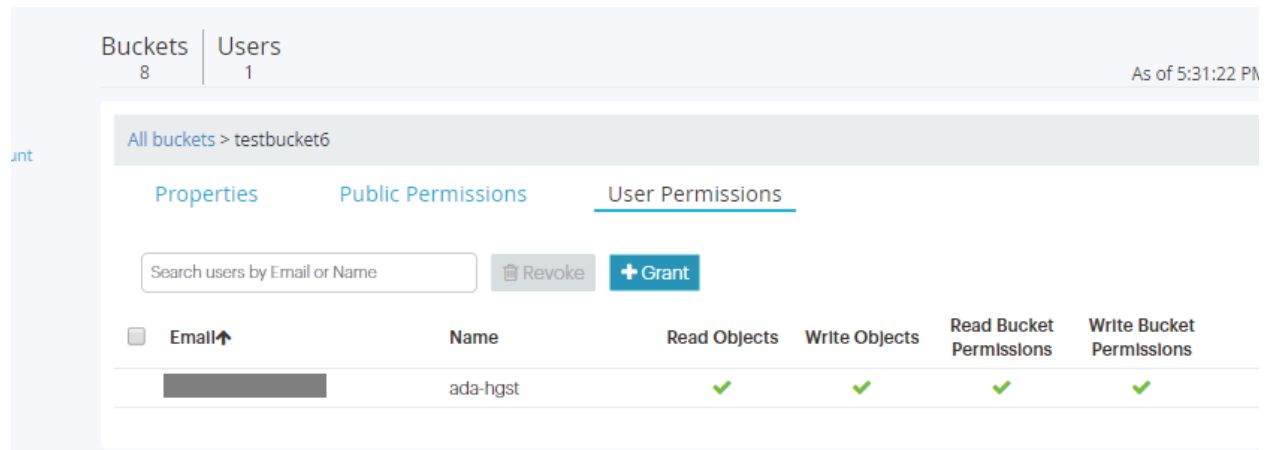
Figure 3-9. A bucket's public permissions

1. In the navigation bar, click **Buckets**.
2. In the search box, type the first few characters of the bucket name, and click **Search**.
3. (Optional) Sort the list by the **Bucket Name** or **Created** column.

- Click the bucket's name.
The bucket's details appear.
- Click **Public Permissions**.

3.5.5 User permissions

Figure 3-10. A bucket's user permissions



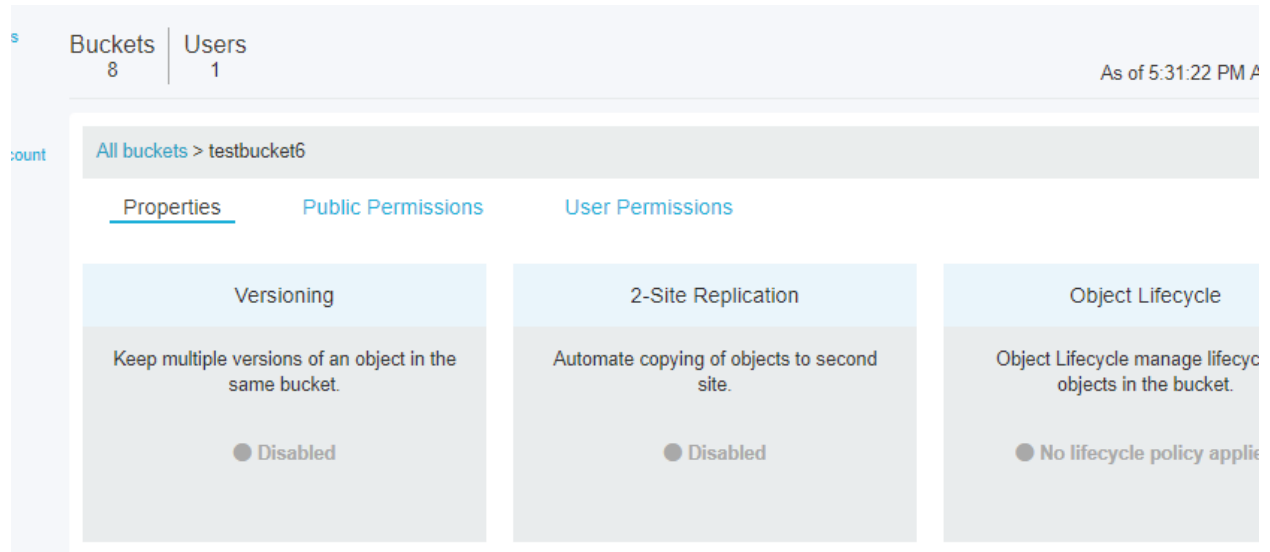
- In the navigation bar, click **Buckets**.
- In the search box, type the first few characters of the bucket name, and click **Search**.
- (Optional) Sort the list by the **Bucket Name** or **Created** column.
- Click the bucket's name.

The bucket's details appear.

5. Click **User Permissions**.

3.6 View bucket properties

Figure 3-11. Viewing a bucket's properties



1. In the navigation bar, click **Buckets**.
2. In the search box, type the first few characters of the bucket name, and click **Search**.
3. (Optional) Sort the list by the **Bucket Name** or **Created** column.
4. Click a bucket name.
The bucket's details appear.
5. Click the **Properties**, **Public Permissions**, or **User Permissions** sub-tabs to see more information about the bucket.

4 Managing users

Topics

- [Add a user](#) on page 22
- [Delete an access key](#) on page 22
- [Disable/enable a user](#) on page 22
- [Disable/enable an access key](#) on page 22
- [Edit a user](#) on page 23
- [Find a user](#) on page 23
- [Generate an access key](#) on page 23
- [View a user's access keys](#) on page 24

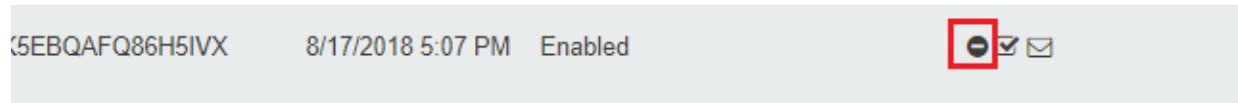
4.1 Add a user

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, click **Add User**.
The **Add User** dialog box displays.
3. In the **Add User** dialog box, type the new user's username and email address.
4. Click **Add**.
The user is added, and the name you entered displays in the **User Name** column. A message displays in a green banner above the list that reads **<email-address-you-entered> is added**.

4.2 Delete an access key

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, expand the target user's email address by clicking the downward arrow next to that user's email address.
ActiveScale View displays a list of that user's keys.

Figure 4-1. Delete an access key



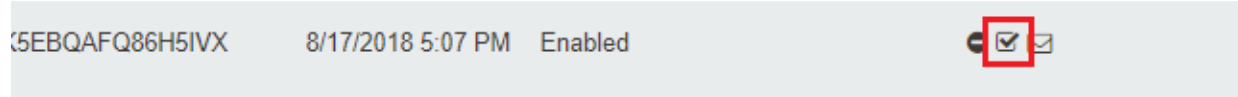
3. In the **Access Key ID** list, click the delete icon in the **Actions** column of the key you want to delete.
The **Delete Access Key** dialog box displays.
4. Click **Delete**.

4.3 Disable/enable a user

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, toggle the check box icon in the target user's **Actions** column.
3. In the **Disable User** dialog box, click **Disable** (or **Enable**) to confirm.

4.4 Disable/enable an access key

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, expand the target user's email address by clicking the downward arrow next to that user's email address.
ActiveScale View displays a list of that user's keys.
3. In the **Access Key ID** list, click the check box icon in the **Actions** column of the key you want to disable/enable.

Figure 4-2. Check box to enable/disable an access key

4. Click **Disable** (or **Enable**).

Note: Disabling/enabling an API key does not restrict the owner of the key if the owner has other API keys. Although the owner can no longer use the disabled API key, they can continue to use any (non-disabled) API keys they have.

4.5 Edit a user

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, click the pencil icon in the target user's **Actions** column.
The **Edit User** dialog box displays.
3. In the **Edit User** dialog box, make the appropriate edits, and click **Update**.

4.6 Find a user

1. In the navigation bar, click **Users**.
2. On the **Users Management** dashboard, type an email prefix in the search box.

4.7 Generate an access key

You might want to generate extra access keys for the account or one of its users in order to give someone temporary access to the system.

1. In the navigation bar, click **Users**.
The **Users** dashboard displays.
2. On the **Users** dashboard, click the key icon in the target user's **Actions** column.
The **New Access Key** dialog box displays the new access key.
3. In the **New Access Key** dialog box, click **Close**.

4.8 View a user's access keys

1. In the navigation bar, click **Users**.

The **Users** dashboard displays.

2. On the **Users** dashboard, expand the target user's email address by clicking the downward arrow next to that user's email address.

ActiveScale View displays a list of that user's keys.

Figure 4-3. A user's access keys

The screenshot shows the ActiveScale Users dashboard. On the left is a navigation sidebar with 'Buckets', 'Users', and 'My Account'. The main area has 'Buckets 8' and 'Users 1' tabs. A search bar and 'Add User' button are at the top. A table lists users, with the first user expanded to show their access keys. The table has columns for Access Key ID, Created, Status, and Actions. A summary bar shows 'Enabled 3' and 'Disabled 0'.

User Email	User Name	Created	Last Modified	Status	Actions
[Redacted]	ada-wdc	8/17/2018 4:13 PM	8/17/2018 5:07 PM	Enabled	[Edit] [Refresh] [Search]
Access Key ID		Created	Status	Enabled 3 Disabled 0	
AK0H7K5EBQAFQ86H5IVX	8/17/2018 5:07 PM	Enabled	[-] [✓] [✉]		
AK0I7K5EBQAYDWWIZQOQ	8/17/2018 5:07 PM	Enabled	[-] [✓] [✉]		
AK0JTK5EBQA9L7XUDMRY	8/17/2018 5:07 PM	Enabled	[-] [✓] [✉]		

Contact Us

Contact Western Digital Support with your rack serial number or deployment ID.

Support website	https://portal.wdc.com/Support/s/login/
Telephone number	1-844-717-7766 or 1-408-717-7766
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