Wasabi Management Console User Guide

Version: 2022-03-10

Revision: A



Copyright

Notice

Information in this guide is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless otherwise noted. No part of this guide may be reproduced or transmitted in any form by means electronic or mechanical, for any purpose, without express written permission of Wasabi Technologies LLC.

Trademarks

WASABI and the WASABI Logo are trademarks of Wasabi Technologies LLC and may not be used without permission of Wasabi Technologies. All other names are used for identification purposes only and are trademarks or registered trademarks of their respective companies.

Copyright © 2022 by Wasabi Technologies 111 Huntington Avenue Boston, MA 02199 United States

All Rights Reserved

Visit us at https://wasabi.com

Contents

Preface

About This Guideviii Related Documentationix Conventions _____ix Technical Supportix Overview 1 Single Sign On (SSO) for Enterprise Accounts1-12 Wasabi Management Console Overview.......1-14 Console Panel 1-18

Searching for Information	1-21
Changing the User Interface Language	1-21
Accessing User Documentation	1-21
Reviewing or Changing Your Profile	1-22
Creating an Account Alias	1-24
Updating the Account Password	1-25
Changing the Account Email	1-25
Creating a Virtual MFA Device	1-25
Enabling FTP/FTPS	1-27
Setting an Account Logging Time	1-28
Adjusting the Session Timeout Length	1-30
Allowing IAM Users and Roles to Access the Billing Portal	1-30
Checking Upload and Download Speeds for a Region	1-31
Configuring the Single Sign On (SSO) Feature	1-33
Deleting an Account	1-38
Exporting a Debug File	1-39
Switching User Roles	1-40
Billing	1-41
Logging Out of Wasabi	1-41
Timing Out of Wasabi	1-41
Buckets and Objects	
Creating a Bucket	2-2
Working With Buckets	2-13
Enabling/Disabling Bucket Logging	2-15
Enabling/Disabling Bucket Versioning	2-16
Reviewing the Bucket Size	2-17
Enabling/Disabling Public Access	2-18
Working With a Bucket Policy	2-20
Enabling Compliance	2-25
Enabling Object Locking	2-27
Setting Object Locking Defaults	2-30
Viewing Object Lock Information for an Object	2-32

2

	Defining an Access Control List	2-36
	Reviewing Bucket Utilization	2-36
	Renaming a Bucket	2-37
	Deleting a Bucket	2-38
	Storing Objects in a Bucket	2-39
	Working With Multiple Folders and/or Files	2-48
	Deleting One or More Folders or Files	2-49
	Making Folders and/or Files Public	2-49
	Making Folders and/or Files Private	2-50
	Reviewing Folder Details	2-51
	Making a Folder Public or Private	2-51
	Reviewing File Details	2-53
	Renaming a File	2-54
	Making a File Public or Private	2-55
	Linking to a File	2-55
	Downloading a File	2-55
	Copying the File Path	2-56
	Deleting a File	2-56
3	Policies	
	Reviewing the Policies Panel	3-3
	Searching for a Policy	3-5
	Toggling the Display of Policies List Columns	3-6
	Toggling the Display of Attached Policies	3-6
	Filtering the Policies List	3-6
	Creating a Policy	3-7
	Using the Policy Generator	3-13
	Reviewing Details and Editing an Existing Policy	3-17
	Reviewing and Editing a Policy	3-18
	Reviewing Policy Usage	3-21
	Reviewing and Managing Policy Versions	3-22
	Deleting a Policy	3-23

4	Access Keys	
	Reviewing the Access Keys Panel	4-3
	Creating a New Access Key	4-5
	Changing the Access Key Status	4-6
	Deleting an Access Key	4-7
5	Groups, Roles, and Users	
6	Groups	
	Reviewing the Groups Panel	6-2
	Searching for a Group	6-4
	Creating a Group	6-4
	Reviewing Details and Editing an Existing Group	6-6
	Users Assigned to the Group	6-7
	Policies Associated with the Group	6-8
	Deleting a Group	6-9
7	Roles	
	Reviewing the Roles Panel	7-2
	Creating a Role	7-4
	Creating a Role for Single Sign On	7-5
	Reviewing Details and Editing an Existing Role	7-7
	Attaching a Policy to a Role	7-8
	Removing a Policy From a Role	7-8
	Deleting a Role	7-9
8	Users	
	Reviewing the Users Panel	8-2
	Searching for a User	8-4
	Creating a User	8-4
	Defining User Password Settings	8-1/

	Reviewing Details and Editing an Existing User	8-16
	Assigned Groups	8-17
	Change Password	8-18
	User Access Keys	8-18
	MFA Settings	
	Policies	
	Signing in as a New User	8-23
	Deleting a User	
9	Billing	
	Accessing and Exiting the Billing Portal	9-2
	Accessing the Billing Portal	9-2
	Returning to the Wasabi Management Console	9-2
	Billing Overview	9-2
	Payment Settings	
	Adding a New Credit Card	9-9
	Making a Card the Default Payment Method	9-10
	Editing a Credit Card	
	Deleting a Credit Card	9-11
	Billing Preferences	
	Setting the Invoice Day of the Month	
	Customizing the Invoice	9-13

Preface

About This Guide

This Guide provides details about Wasabi Management Console features with procedures for new and experienced users. It introduces you to basic Wasabi features to:

- Sign up to use Wasabi
- Sign into Wasabi
- Create a bucket
- Store objects (folders and files) in the bucket
- ◆ Create a user account
- Create groups
- Create policies
- Create roles
- ♦ Add an access key to an account

Related Documentation

Additional Wasabi documentation includes:

- Wasabi Management Console Getting Started Guide—Provides a quick overview of basic Wasabi features with procedures for new and prospective users. It describes how to sign up to use Wasabi, sign into Wasabi, create a bucket, store objects (folders and files) in the bucket, create a user account, and add an access key to the user account.
- Wasabi API Guide—Describes variations in functionality as they pertain to using the Wasabi API relative to Amazon Web Services' Simple Storage Service (AWS S3) and Identity and Access Management (AWS IAM) APIs. Wasabi's object storage service is built to be 100% bit-compatible with the AWS S3 and IAM APIs. In certain cases, Wasabi provides additional functionality relative to AWS S3 (or implements functionality in a different manner than AWS S3).

Conventions

This document uses the following typographical conventions:

Convention	Description
IMPORTANT	Stresses the importance of the information presented.
Note	Calls attention to additional information or an explanation.
Bold Text	Used to indicate specific text that you need to enter (key in) or a button that you need to click.
Italics Text	Used to indicate titles of books or sections within this document, and for general emphasis.

Technical Support

The Wasabi web site has the latest product information. Use this resource to review product information, download software updates, contact technical support, access the Wasabi knowledge base, or provide feedback on Wasabi documentation and online help:

www.wasabi.com

Use this email address to contact a Wasabi Customer Support representative:

support@wasabi.com

1 Overview

Wasabi is a cloud-based object storage service for a broad range of applications and use cases. Wasabi is designed for individuals and organizations that require a high-performance, reliable, and secure data storage infrastructure at minimal cost.

This guide describes Wasabi Management Console features and provides step-by-step procedures. Go to the Wasabi product page for FAQs and information on Wasabi features and pricing.

This chapter includes:

- ♦ "Wasabi Basics," page 1-2
- ♦ "Accessing Wasabi," page 1-2
- "Wasabi Management Console Overview," page 1-14
- ◆ "Console Display Features," page 1-16
- "Reviewing or Changing Your Profile," page 1-22
- ◆ "Switching User Roles," page 1-40
- "Logging Out of Wasabi," page 1-41

Wasabi Basics

Wasabi stores data as objects in buckets. An object consists of a file and, optionally, any permissions and metadata that describes the file. A bucket is a storage container into which you upload your files.

You can have one or more buckets and, for each, you can:

- Control access to it (who can create, delete, and list objects in the bucket)
- View access logs for the bucket and the objects it stores

Common Use Scenarios

The Wasabi web page lists many of the ways you can use Wasabi.

Accessing Wasabi

There are several ways to access Wasabi:

- ◆ As a prospective user, you can sign up for a Wasabi trial account. It is free for 30 days and includes 1 TB of storage. Refer to "Signing Up for a Trial Account," page 1-3.
- ◆ As a Wasabi user, you simply sign in using your account credentials. Refer to "Signing in to Wasabi," page 1-7.
- ◆ As an enterprise customer, you can sign in using Wasabi's Single Sign On (SSO) feature. Refer to "Single Sign On (SSO) for Enterprise Accounts," page 1-12.

Note: The Wasabi Management Console as well as the Billing Portal are accessible with iOS and Android: iOS (12 and 13) along with the Safari browser Android (9 and 10) along with the Chrome browser

Signing Up for a Trial Account

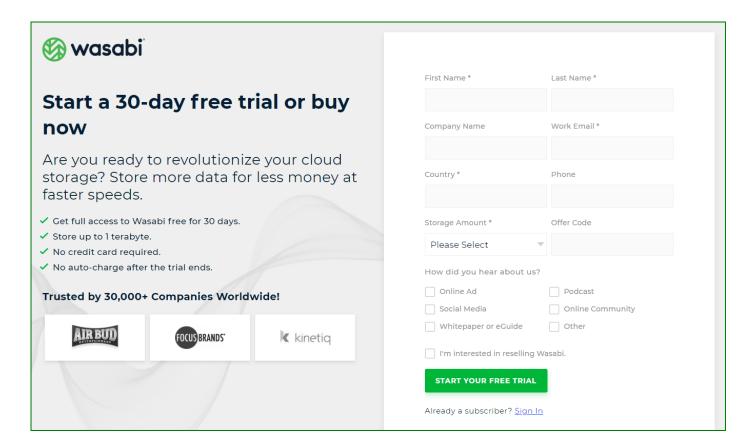
To sign up for a free 30-day account:

1 Go to www.wasabi.com

As a user new to Wasabi, you need to set up an account by completing this procedure. But, check with your administrator to determine if your organization has a Wasabi account and security credentials that you should use. If you already have an account, continue by "Signing in to Wasabi," page 1-7.

Note: You will not be charged to work through the exercises in this *Getting Started Guide*, and you will not be charged for Wasabi until you use it for data storage. For FAQs and information on Wasabi features and pricing, go to the Wasabi product page.

- 2 Click the green **TRY or BUY Now** button.
- 3 Enter your first and last names. And, enter your email address at which you will receive a free trial invitation. Enter your country.
- 4 Select the amount of storage that you would require.
- 5 Optionally, enter an offer code.
- 6 Optionally, indicate how you heard about Wasabi.

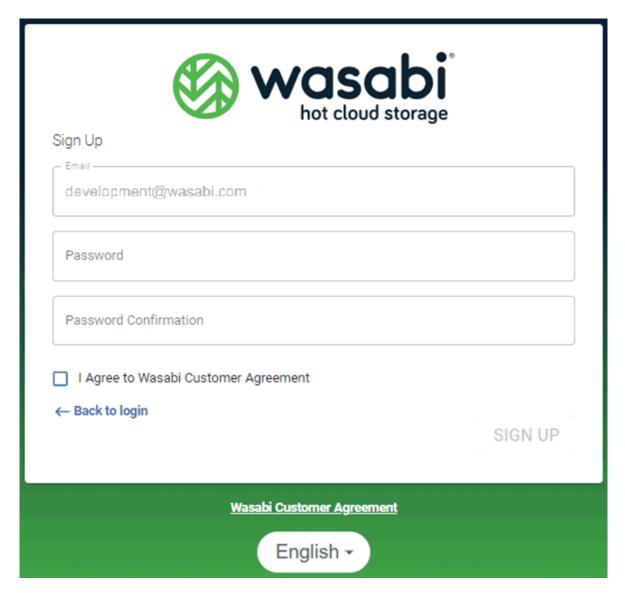


- Click **START YOUR FREE TRIAL**. Wasabi will email an invitation as your link to Wasabi.

 You can use your free trial to store up to 1 TB of storage for 30 days, without the requirement of a credit card.
- In your email ("You are invited to try Wasabi"), click **Create Account** to create your free trial account. The Sign Up panel is displayed.

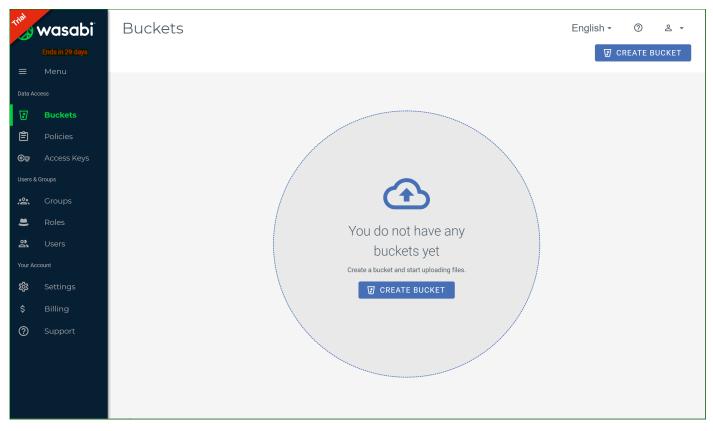
NOTE: As an alternative to English, you can click the **English** button (located below the Sign Up panel) and select **Deutsche**, **Français**, or 日本語 to display the interface in German, French, or Japanese.

9 Your email is automatically entered as your account name on the Sign Up panel. For example:



10 Enter a password and re-enter to confirm.

- Click to check that you have read and agree to the Wasabi Customer Agreement. A link to the Agreement is available below the Sign Up panel.
- 12 Click SIGN UP.
- You are now ready to work with the Wasabi Management Console and add a bucket.



The remainder of this Guide describes Wasabi features. As a new user, you might want to start by creating a bucket, as described in Chapter 2, *Buckets and Objects*. Or, refer to the *Wasabi Management Console Getting Started Guide* for a step-by-step overview of Wasabi.

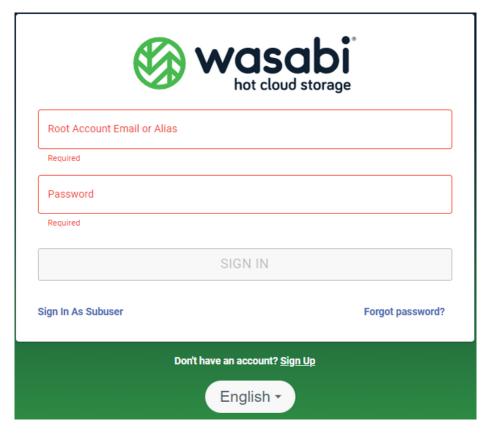
Signing in to Wasabi To sign

To sign in with a Wasabi account:

At www.wasabi.com, click **Sign In** at the top of the Wasabi page.You can sign in as a root user or subuser, as described in this procedure. (User names are described in Chapter 8, *Users*.)

Note: If you are an enterprise user, refer to "Single Sign On (SSO) for Enterprise Accounts," page 1-12.

NOTE: If you do not have an account, click **Sign Up** (below the Sign In panel) and continue with "Signing Up for a Trial Account," page 1-3.



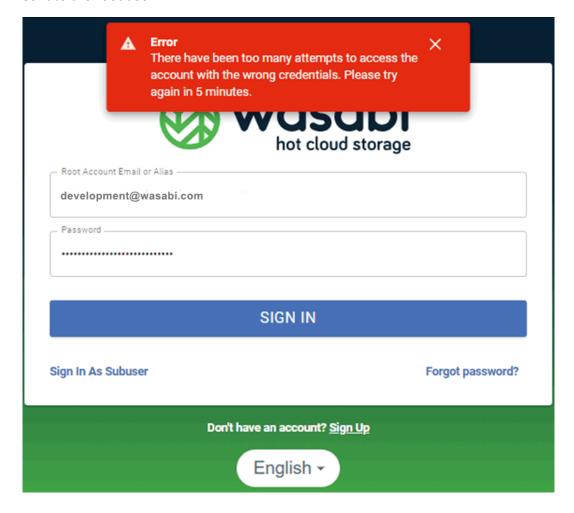
Note: As an alternative to English, you can click the **English** button (located below the Sign Up panel) and select **Deutsche**, **Français**, or 日本語 to display the interface in German, French, or Japanese.

- To sign in as a root user, follow step 2a below. To sign in as a subuser, follow step 2b.
 - **a** To sign in as a root user, enter your account email or alias. (Aliases are described in "Creating an Account Alias," page 1-24.) Then, enter your password.
 - **b** To sign in as a subuser, click **Sign In As Subuser**. Then, enter the root account email, subuser name, and password.

	wasabi hot cloud storage	
Root Acc	ount Email or Alias	
Required		
Subuser I	Name	
Required		
Password		
Required		
	SIGN IN	
← Login as	Root User	
(i)	If you forget your password, please contact Root Account owner to reset	
	Don't have an account? <u>Sign Up</u>	
	English ▼	

3 Click **SIGN IN**.

As part of the Wasabi security policy, the account will be locked out for 5 minutes after 5 successive failures with an incorrect password. When this happens, the Sign In panel displays an alert message and an email is sent to the root user.



🦔 wasabi Buckets 2 Q Search Buckets ☑ CREATE BUCKET **Bucket List ©**→ Access Keys Bucket Name Actions ar+docs us-east-1 Default Dec 26, 2019 8:30 AM : **Groups** * Default Dec 26, 2019 10:18 AM user.docs ar+docs us-east-1 Rows per page: 10 ▼ Viewing 1-2 of 2 🔯 Settings

You are now ready to work with the Wasabi Management Console. The Bucket List is displayed. For example:

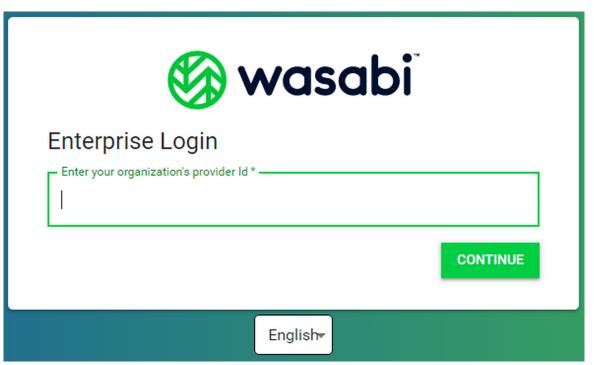
Note: The language button is available at the top right of this panel, which enables you to change the user interface language at any time while working with Wasabi.

Single Sign On (SSO) for Enterprise Accounts

If you have an enterprise account with Wasabi Single Sign On (SSO) configured, you will see this login when you access the Wasabi URL:

https://auth.wasabisys.com

Note: You must contact Wasabi Customer Support to enable the SSO feature.



1 Enter your organization's provider ID.

Note: As an alternative to English, you can click the **English** button (located below the Sign Up panel) and select **Deutsche**, **Français**, or 日本語 to display the interface in German, French, or Japanese.

Click CONTINUE and you will be redirected to the Identity Provider (such as Okta) login panel. Enter your credentials.

If you have been assigned with multiple roles on the Identity Provider, select one of the roles from a drop-down list. For example:

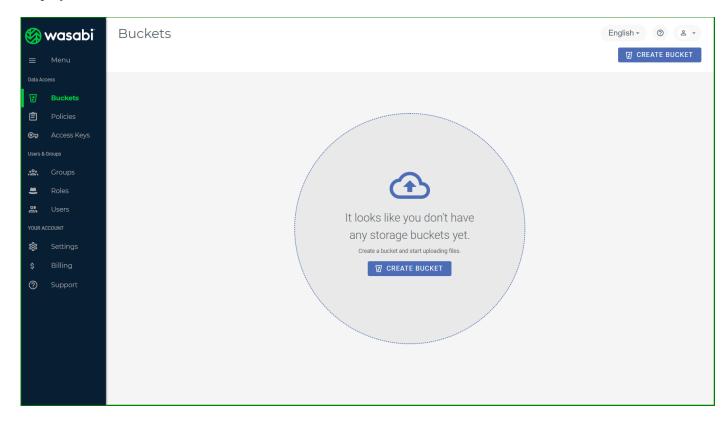


Based on the selection, you will be able to perform actions on the Wasabi console as per the policy associated with your role.

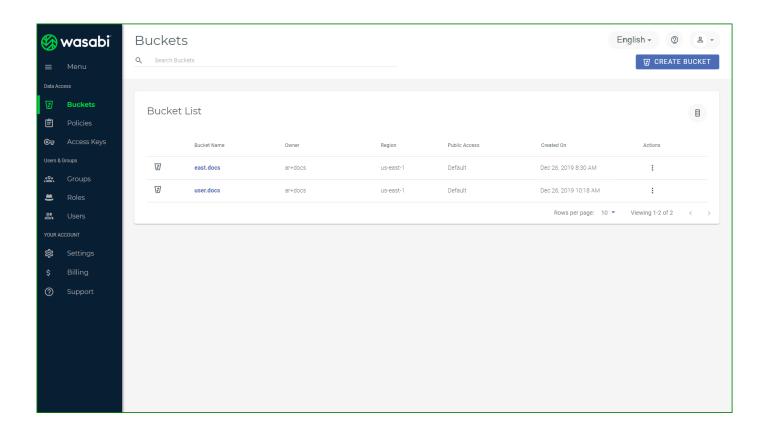
Click **CONTINUE**.

Wasabi Management Console Overview

When you sign in to the Wasabi Management Console, the display depends on whether or not you have created buckets. If you do not have any buckets in your account, a page suggesting that you create a bucket is displayed.



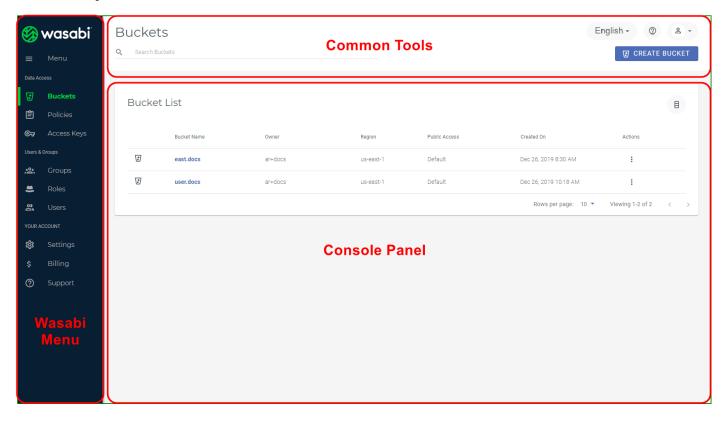
If you have buckets in your account, the Bucket List is displayed from which you can manage storage.



Console Display Features

The Wasabi Management Console consists of three basic work areas:

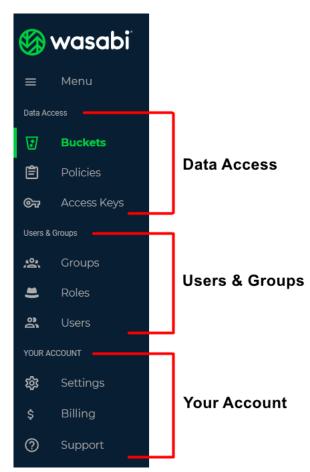
- Wasabi menu
- Common tools
- ◆ Console panel



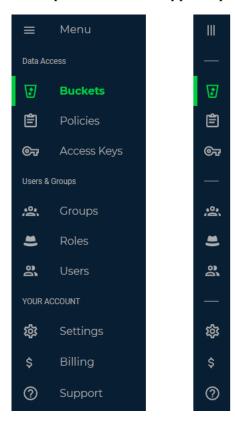
Wasabi Menu

The Wasabi menu is displayed on the left of the screen.

- ◆ Data Access, where you manage buckets and objects (see Chapter 2, *Buckets and Objects*), policies (Chapter 3, *Policies*), and access keys (Chapter 4, *Access Keys*)
- ◆ Users & Groups, where you manage groups (Chapter 6, *Groups*), roles (Chapter 7, *Roles*), and users (see Chapter 8, *Users*)
- ◆ Your Account, where you establish account settings (see "Reviewing or Changing Your Profile," page 1-22) and billing information (Chapter 9, *Billing*), and access support such as documentation, a knowledge base, and downloads



Click Menu to toggle between showing and hiding the menu. Chapters in this document describe each option. Click the Support option to access user documentation at any time.

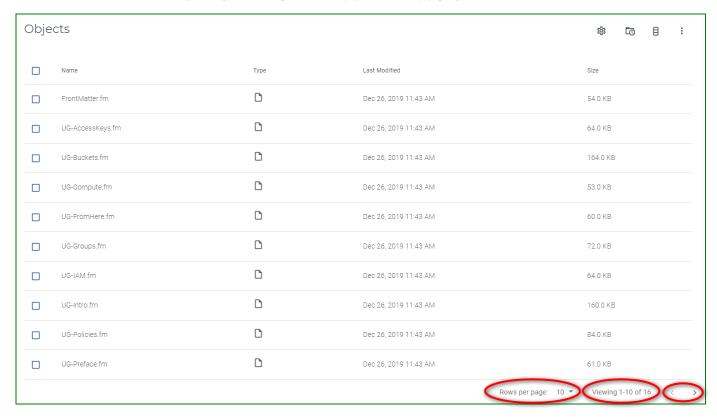


Console Panel

Information is listed on the console panel, which is the largest area of the screen. For example, if you are working with Buckets, the Bucket List is displayed. If you are working with Groups, you will see the Groups List.

You can indicate that you want to display 10, 25, 50, or 100 rows of information per page. This option is available at the bottom right of the Buckets, Objects, Policies, Access Keys, Groups, Roles, and Users lists. The rows per page, an indication of the entries you are viewing, and the total number of entries are indicated. In the following example, we are displaying 10 rows per page and viewing entries 1 to 10 of the total of 16 entries.

You can use the < and > keys to go to the previous (<) or next (>) page.



Note: A bucket with a large number of objects will list the first 300 keys when the bucket is first opened. As you page through the list, it will fetch 300 keys at a time. Any operation, such as searching or sorting, will take place only on these 300 objects. We recommend using Wasabi Explorer or another third-party tool that will download the entire list of objects if this is needed.

Common Tools

Several tools are displayed across the top of the screen. For example:



Tool	Description
Q Search Buckets	Enables you to search for certain types of information, depending on the specific panel. In the example above, you can search for buckets.
English →	Enables you to change the user interface language at any time while working with Wasabi. See "Changing the User Interface Language," page 1-21.
②	Opens the <i>Wasabi Management Console User Guide</i> and displays descriptive information about the current topic. For example, if you click this icon when the Users panel is displayed, you will access user documentation for the Users feature.
0 +	Indicates the account sign-in person. A drop-down accesses account tools used for:
	◆ "Reviewing or Changing Your Profile," page 1-22
	◆ "Switching User Roles," page 1-40
	♦ "Billing," page 9-1
	◆ "Logging Out of Wasabi," page 1-41
☑ CREATE BUCKET	Displays a button that enables you to perform a task (depending on where you are in Wasabi. Examples of these buttons are shown here.
CREATE FOLDER	

Searching for Information

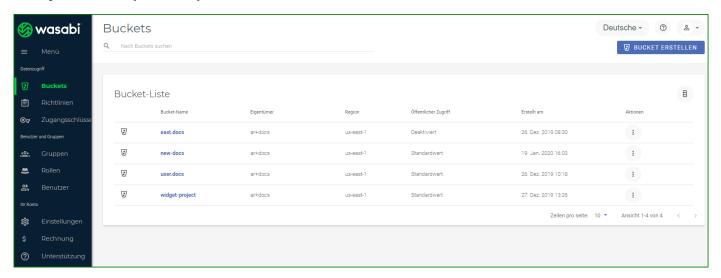
You can search for information when you see a button such as



- To the right of the magnifying glass, enter a text string for which to search. (The text string might appear anywhere in the name and letters for the text are not case-sensitive.)
- 2 Press the **Enter** key. Names that include text that matches the string are displayed after you press **Enter**.

Changing the User Interface Language

When you see the language option _____, you can click this button and select **Deutsche**, **Français**, or 日本語 as an alternative to English. The interface is then displayed in German, French, or Japanese. For example, German (Deutsche) is selected here:

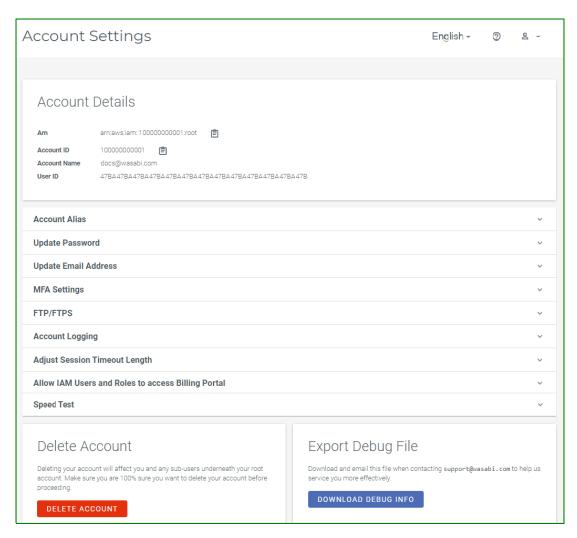


Accessing User Documentation

You can access user documentation with the button. Or, at any time, select the **Support** option on the Wasabi menu. The Documentation page on the Wasabi web site is displayed.

Reviewing or Changing Your Profile

- 1 Click **Settings** on the Wasabi menu. Or, open the account sign-in drop-down and click **Settings**.
- 2 Select the **My Profile** option. A panel such as the following is displayed:



The panel shows:

- Arn—The Amazon Resource Name for the account. An ARN uniquely identifies Amazon Web Services (AWS) and is required to specify a resource definitively across all of AWS (such as in IAM policies, Amazon Relational Database Service (Amazon RDS) tags, and API calls).
- ◆ Account ID—The account identification number assigned by Wasabi.
- ◆ Account Name—The name of the account (used to sign in).
- ◆ User ID—A unique user identification.

You can click 📋 to copy the Arn or Account ID to the clipboard.

The panel also includes tools for:

- ◆ "Creating an Account Alias," page 1-24
- "Updating the Account Password," page 1-25
- ◆ "Changing the Account Email," page 1-25
- ◆ "Creating a Virtual MFA Device," page 1-25
- "Enabling FTP/FTPS," page 1-27
- "Setting an Account Logging Time," page 1-28
- ◆ "Adjusting the Session Timeout Length," page 1-30
- ◆ "Allowing IAM Users and Roles to Access the Billing Portal," page 1-30
- "Checking Upload and Download Speeds for a Region," page 1-31
- "Configuring the Single Sign On (SSO) Feature," page 1-33
- "Deleting an Account," page 1-38
- "Exporting a Debug File," page 1-39

Creating an Account Alias

An alias a name (often a friendly identifier) that you can use rather than your account email address.

- Click **Settings** on the Wasabi menu and open the **Account Alias** drop-down.
- 2 Enter the alias, which must follow these conventions:
 - At least three characters.
 - Lowercase letters, numbers, or hyphens (although the hyphen cannot be at the beginning or end of the alias).

For example, rather than using development@wasabi.com, you can create an alias for the development engineering group called "dev-engineering."

Click SAVE.

If you create another alias, it will overwrite one that already exists.

Signing in With an Alias

After you create an alias, you can log out of the Root account and sign in using the alias.

- 1 On the Wasabi Sign In screen, enter the alias.
- **2** Enter the password. This is the same password as for the account.
- Click SIGN IN.

Updating the Account Password

- Click **Settings** on the Wasabi menu and open the **Update Password** drop-down.
- **2** Enter the old password.
- 3 Enter the new password.
- 4 Enter the new password again as confirmation.
- 5 Click **UPDATE**.

Changing the Account Email

- Click **Settings** on the Wasabi menu and open the **Update Email Address** drop-down.
- **2** Enter the new email address.
- 3 Enter the email address again as confirmation.
- 4 Click **UPDATE ACCOUNT EMAIL**.

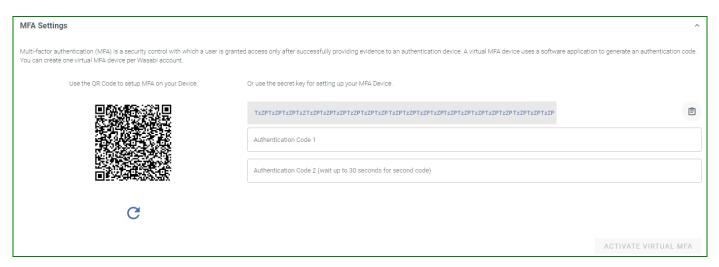
Creating a Virtual MFA Device

Multi-factor authentication (MFA) is a security control with which a user is granted access only after successfully providing evidence to an authentication device. A virtual MFA device uses a software application to generate an authentication code. You can create one virtual MFA device per Wasabi account or user.

Before you get started, note that you must have access to the hardware that will host the virtual MFA device (application). For example, if the MFA will be used with a virtual MFA application on a smart phone, you must have access to the smart phone when creating the virtual MFA device.

Click **Settings** on the Wasabi menu and open the **MFA Settings** drop-down.

Wasabi displays a QR code graphic and secret key. (The QR code graphic is an image of the secret key.) For example:



You can use the Refresh \overline{C} button to change the QR code and secret key.

IMPORTANT:

Save a copy of the secret key in a secure place. You can click to copy it to the clipboard. If you lose the MFA device or need to reinstall the MFA software application, you can reconfigure it using the same virtual MFA without creating a new virtual MFA.

Note: Timing is important for the following steps, so you may want to review the remainder of this procedure before proceeding.

- Open the virtual MFA application (such as on the smart phone). If applicable, choose the option to create a new account (a new virtual MFA device).
- 4 Use the device camera (such as the smart phone camera) to scan the QR code graphic.

 Or, Enter the secret key, where appropriate, in the MFA application.
- When a one-time password appears in the MFA application, enter this password in the Wasabi area labeled, "Authentication Code 1."

IMPORTANT: Enter this code in Wasabi immediately after you receive it because it is time-based and will expire quickly.

After approximately 30 seconds, the device will generate a second one-time password. Enter this password in the Wasabi area labeled, "Authentication Code 2." (Enter it immediately because it, too, is time-based and will expire.)

7 Click ACTIVATE VIRTUAL MFA.

Enabling FTP/FTPS

The following modes of FTP are supported:

- ◆ FTP (unsecure) passive mode only
- ◆ FTP over TLS Explicit
- ◆ FTP over TLS Implicit

The service URL for Wasabi FTP usage is the same as it is for S3 API usage (refer to the Wasabi Knowledge Base for service URLs for different regions). The username and password used for FTP access are the same username and password used to access the Wasabi Management Console.

Note: FTP over SSL and SFTP (FTP over SSH) are NOT supported.

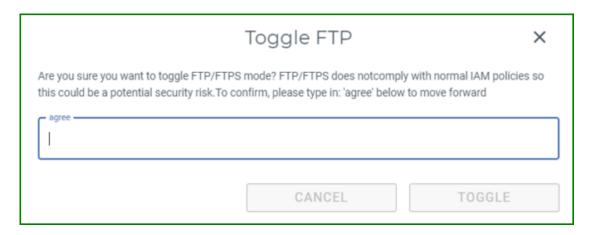
Note: FTP login will fail if the account is activated with MFA.

To enable FTP/FTPS:

- Click **Settings** on the Wasabi menu and open the **FTP/FTPS** drop-down.
- 2 Slide the option to the right. The slide option is blue when FTP/FTPS is enabled.

When FTP/FTPS is disabled, the option is gray:

A message indicates that FTP/FTPS does not comply with normal IAM policies, which could be a potential security risk:



4 If you want to continue to enable FTP/FTPS, enter **agree** in the message area and then click **TOGGLE**.

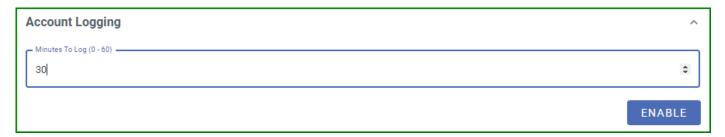
Note:

The user name and password for FTP/FTPS usage is the same as the user name and password for the root account.

Setting an Account Logging Time

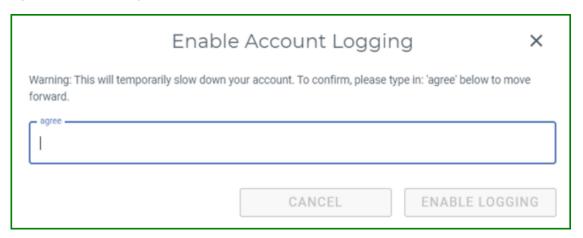
Account logging is used for customer support. If you report an account problem to Wasabi, a support engineer may request that you enable this feature for a set the number of minutes (up to 60) during which the system will monitor the account and generate activity logs for the engineer. Although performance may be affected while the system is monitoring activity, performance will resume after the specified time period when the system stops logging.

- Click **Settings** on the Wasabi menu and open the **Account Logging** drop-down.
- 2 Enter the number of minutes (up to 60) during which the system will monitor the account.



3 Click **ENABLE**.

A message will warn that account logging will temporarily slow down your account. To confirm this, enter **agree** in the message area and then click **ENABLE LOGGING**.



4 If you want to continue to enable account loging, enter **agree** in the message area and then click **ENABLE LOGGING**.

Turning Off Account Logging

To turn off account logging once it is enabled, click **TURN ACCOUNT LOGGING OFF**.



Account logging is disabled after you click this button.

Adjusting the Session Timeout Length

You can set the number of minutes of inactivity after which a session (console or billing) will time out. The default is 60 minutes. This setting can be 15 to 120 minutes.

- 1 Click **Settings** on the Wasabi menu and open the **Adjust Session Timeout Length** drop-down.
- Enter the number of minutes.
- 3 Click UPDATE SESSION TIMEOUT LENGTH.

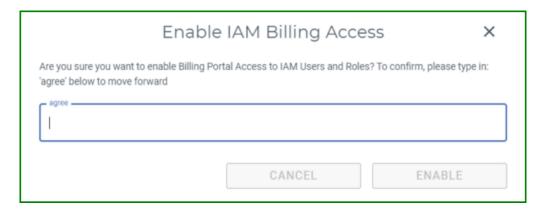
After you change the session timeout length, the **RESET** button is available to return the timeout length to the default of 60 minutes:



Allowing IAM Users and Roles to Access the Billing Portal

You can enable/disable billing portal access for IAM users and roles. This does not provide direct access, which is controlled by policies. Instead, it toggles control for users/roles who could access the billing portal.

- 1 Click **Settings** on the Wasabi menu and open the **Allow IAM Users and Roles to access Billing Portal** dropdown.
- 2 Slide the option to the right. The slide option is blue when access to the billing portal is enabled. When access to the billing portal is disabled, the option is gray:
- 3 A message asks you to confirm that you want to enable access to the billing portal:

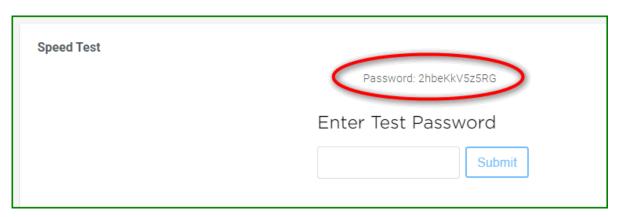


If you want to continue to enable access to the billing portal, enter **agree** in the message area and then click **ENABLE**.

Checking Upload and Download Speeds for a Region

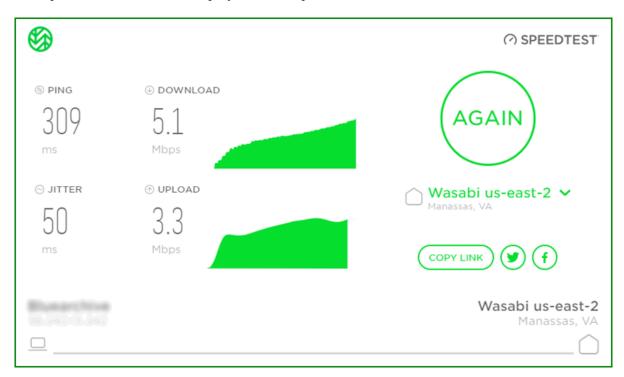
The Speed Test feature enables you to check the upload and download speeds for a selected region.

- 1 Click **Settings** on the Wasabi menu and open the **Speed Test** drop-down.
- 2 Enter the password displayed on your screen.



- Click **Submit**.
- 4 Select a region from the region drop-down (under **GO**).
- 5 Click **GO**.

The speed test results will display. For example:



To select a different region, click on the region drop-down (under **AGAIN**), select a region, and then click **AGAIN**.

Configuring the Single Sign On (SSO) Feature

The Wasabi Single Sign On (SSO) feature enables you to manage access to multiple Wasabi accounts. Your users will log into a portal (through a provider such as Okta) and access their Wasabi accounts with the credentials you set up.

NOTE:

You must contact Wasabi Customer Support to enable the SSO feature.

As part of the configuration procedure, you will:

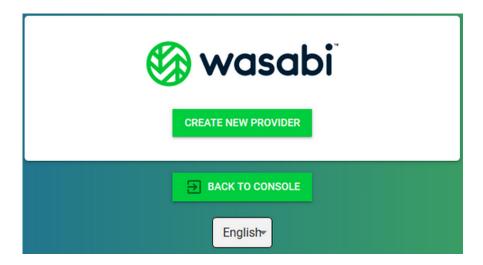
- ◆ Install and configure an Identity Provider (IDP) of a third-party application (such as configure Okta, Auth0, or Shibboleth). Refer to https://wasabi-support.zendesk.com/hc/en-us
- Configure SSO by continuing with the procedure below.
- Click **Settings** on the Wasabi menu and open the **SSO** (**Single Sign On**) drop-down.
- 1 Click **CONFIGURE SSO**.



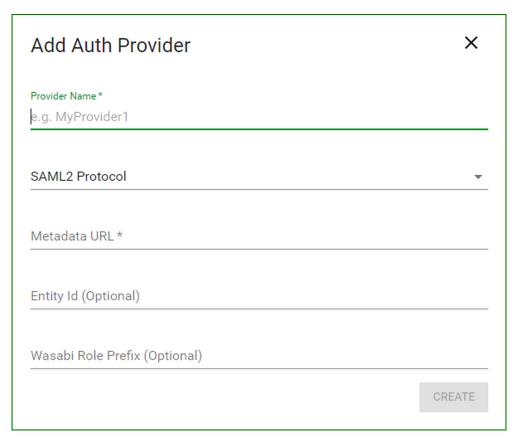
By default, SSO is disabled for existing and newly created Wasabi accounts. You will see this option only if it is available for your account.

If you have already configured SSO, refer to "Modifying the SSO Configuration," page 1-37 to configure a new provider or modify an existing provider.

Click **CREATE NEW PROVIDER**. (Or, click **BACK TO CONSOLE** to return to the ACCOUNT SETTINGS panel.)



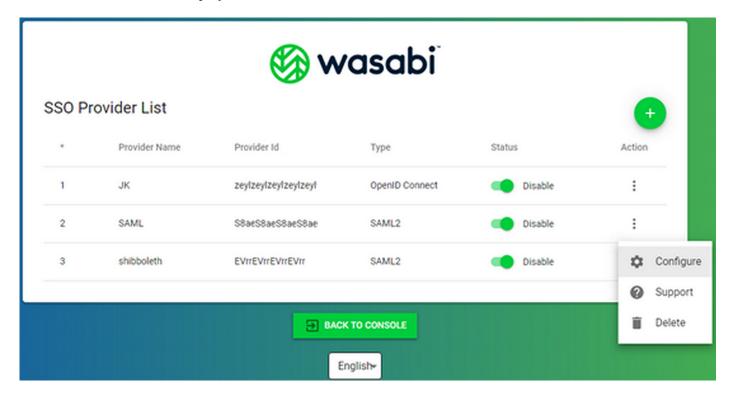
A panel is displayed on which you can add an authorized provider. Enter a name for the provider. It is best to use a name that will be easily recognized by the users.



- **4** Select one of these protocols:
 - ◆ SAML2
 - OpenID Connect (OIDC)
- 5 Enter the metadata URL that was provided during IDP configuration. For example, enter the URL indicated when configuring SAML2 with Okta.

- Optionally, enter an entity ID. For example, a SML2-based IDP can declare more than one "entity" in the metadata XML (multiple IDP providers each with separate public keys, etc.).
- Optionally, enter a Wasabi role prefix. The SSO feature uses this prefix to map to Wasabi roles. By default, the prefix is assumed to be "wasabi-" if you do not enter a different prefix. When Wasabi receives a group/role name from the IDP that starts with this prefix, Wasabi looks for a role with the same name in the Wasabi account. For more information about Wasabi roles, refer to Chapter 7, *Roles*.
- 8 Click CREATE.

The SSO Provider List is displayed.



This list shows the serial number, name, ID (which will be used on the enterprise login), and protocol type for each provider.

If you want to add a provider, click and return to the procedure above.

You can click the toggle to enable or disable the provider status. The slide option is green when the provider is enabled. When the provider is disabled, the option is gray:

In addition, you can click to the right of a provider and select:

- **Configure** to edit the provider.
- **Support** to access Wasabi Technical Support.
- **Delete** to delete the provider.

Click **BACK TO CONSOLE** to return to the ACCOUNT SETTINGS panel.

Set up roles and a policy for the sign in. Refer to Chapter 3, *Policies*, and Chapter 7, *Roles*. Begin by reviewing the information in "Creating a Role for Single Sign On," page 7-5.

Modifying the SSO Configuration

1 Click **CONFIGURE SSO** on the ACCOUNT SETTINGS panel.



The SSO Provider List is displayed. Configure a new provider or modify an existing provider, as described in the procedure for "Configuring the Single Sign On (SSO) Feature," page 1-33.

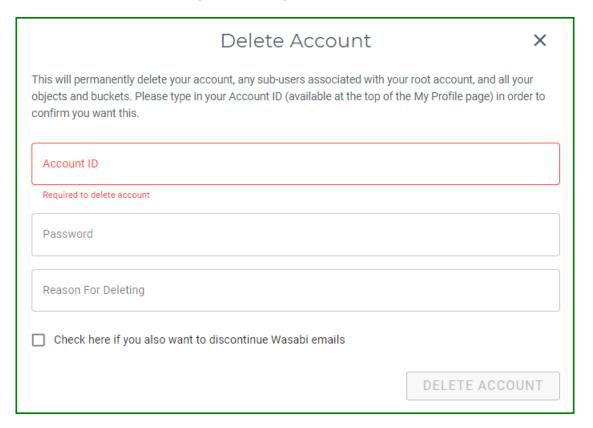
Deleting an Account

You can delete the account only if you are the root user.

IMPORTANT:

Delete an account with caution because deleting an account affects you and any sub-users under your root account. This action permanently deletes your account, any sub-users associated with your root account, and all of your objects and buckets.

- 1 Click **Settings** on the Wasabi menu.
- 2 Click **DELETE ACCOUNT**. A panel will request information to confirm the account deletion:



3 Enter your account identification number, which is found at the top of the User panel. For example:



- You can click to copy this number to the clipboard and then paste it to the Delete Account panel.
- 4 Enter your account password and the reason you are deleting the account.
- 5 Optionally, you can indicate that you want to discontinue Wasabi emails.
- 6 Click **DELETE ACCOUNT**. The account is deleted and the Wasabi Sign In panel is displayed.

Exporting a Debug File

To facilitate customer support and more effectively service you, a Wasabi support technician may request that you download and email a debug file to help Wasabi Support. To do so:

- 1 Click **Settings** on the Wasabi menu.
- Click **DOWNLOAD DEBUG INFO**. A message indicates that the file is downloading. The downloaded will be named **wasabi-support-config-[date].json** and you can email it to support@wasabi.com

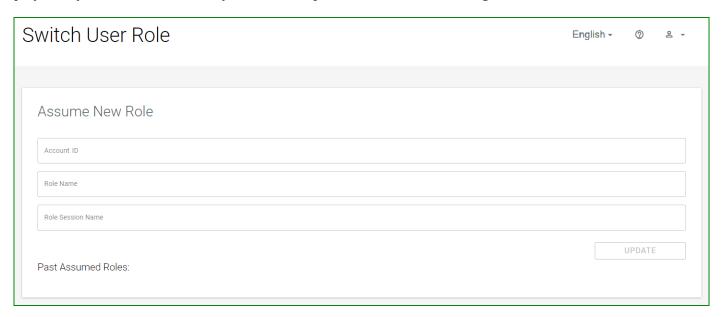
Switching User Roles

A role is an identity with permissions that determine what the role can and cannot do in Wasabi. A role can be associated with any user who needs that identity. For example, "contract engineer" may be a role. If Mary, Bob, Jennifer, and John are associated with that role, they would share in the permissions defined for a "contract engineer."

As a user, you might have permission to switch roles created within the current or another Wasabi account. In this way, you can switch to a role, use the Wasabi Management Console with permissions that you do not normally have, and then exit from the role to surrender the permissions. For example, switching to a might grant you access to resources typically not available to you. If you normally functions as a contract engineer, you might need to access schematic drawings and can switch to the "engineer-schematics" role to do so.

Roles are described in more detail in Chapter 7, Roles.

Open the account sign-in drop-down and click **Switch Role**. The Switch User Role panel is displayed. If you are the Root User, you will see a panel such as the following:



- **2** Enter the account identification of the role you want to assume.
- 3 Enter name of the role you want to assume.
- 4 Enter a name to use for the role in this session.
- 5 Click **UPDATE**.

You have switched to the new role for the current session (until you switch roles again or log out).

Billing

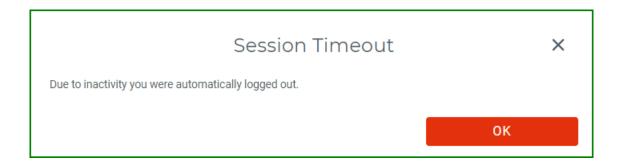
The billing portal is described in Chapter 9, *Billing*.

Logging Out of Wasabi

- 1 Open the account sign-in drop-down.
- 2 Click **Logout**.

Timing Out of Wasabi

If you are not active in Wasabi, your session will time out automatically after one hour of inactivity (default) or the timeout length set by the root user (between 15 and 120 minutes). Note, however, that this will *not* occur if you are uploading objects.



2 Buckets and Objects

Wasabi stores *objects* (folders and files) in *buckets*. Once you create a storage bucket, you can upload objects into the bucket. You can create up to 1000 buckets per account.

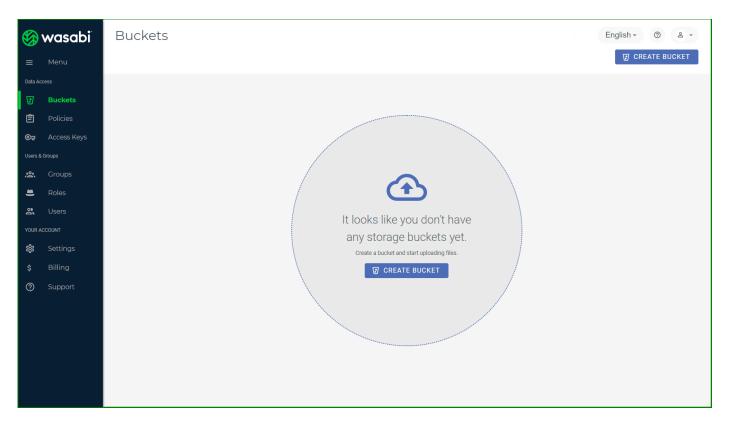
Procedures in this chapter describe:

- ♦ "Creating a Bucket," page 2-2
- ♦ "Working With Buckets," page 2-13
- "Storing Objects in a Bucket," page 2-39
- "Reviewing Folder Details," page 2-51
- "Reviewing File Details," page 2-53

Creating a Bucket

On the Wasabi menu, click **Buckets** and then click the **CREATE BUCKET** button.

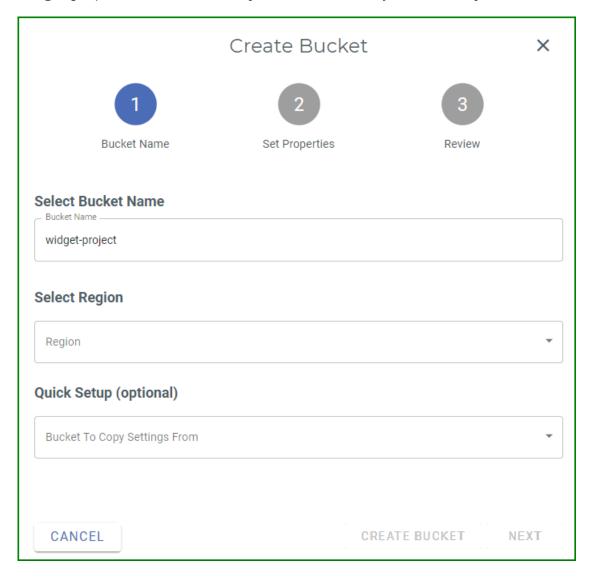
If you are a new user, you may see a screen such as the one below. You can click either blue **CREATE BUCKET** button.



In the "Select Bucket Name" area, enter a unique DNS-compliant name for your new bucket. A bucket name can consist of 3 to 63 lowercase letters, numbers, periods, and dashes. The name must begin with a lower-

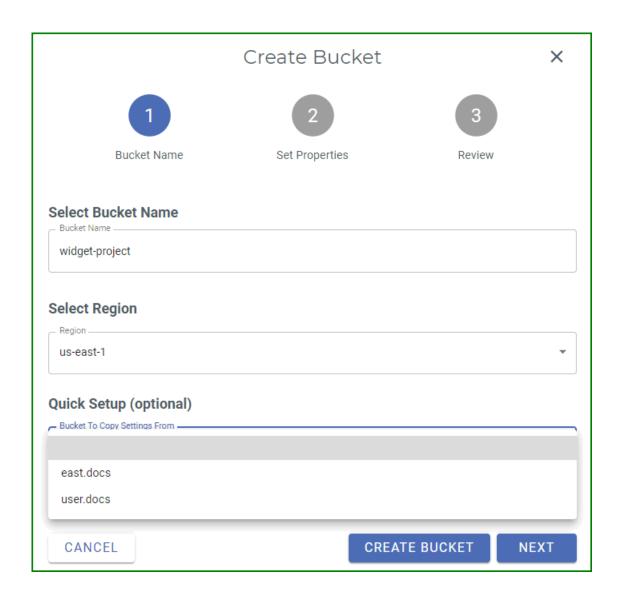
case letter or number. The name cannot contain underscores, end with a dash, have consecutive periods, or use dashes adjacent to periods. And, the name cannot be formatted as an IP address (123.45.678.90).

widget-project is used in the example below; but enter your own unique name.

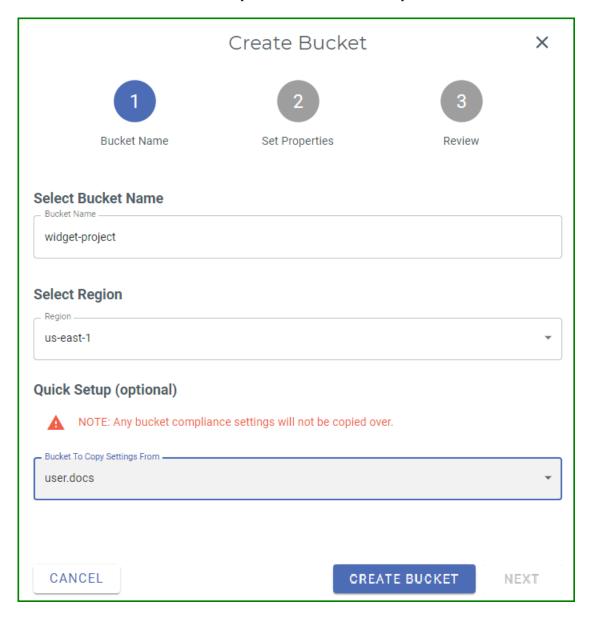


Before naming a bucket, you should develop a naming strategy following these guidelines:

- ♦ The name must be unique across all existing bucket names in Wasabi. The bucket name must:
 - Be a valid DNS name, which can include lowercase letters, numbers, and dashes,
 - Begin with a lowercase letter, and
 - Include between 3 and 63 characters.
- Choose a bucket name that reflects the objects you will store in the bucket. The bucket name is visible in the URL that points to the objects you will put in the bucket.
- 3 Select the region (geographic location) where you want the bucket to reside.
- 4 At this point, you have three options:
 - Create the bucket without enabling bucket versioning or logging options. Simply click CREATE BUCKET
 to create the bucket and end this procedure.
 - Copy settings from an existing bucket (continue with Step 5).
 - Create the bucket with bucket versioning and/or logging features (continue with Step 6).
- If you have an existing bucket, a "Quick Setup" area is included on the Create Bucket panel. Optionally, you can copy the settings from an existing bucket. To do so, click in the "Quick Setup" area. A list of existing buckets is displayed. For example:



Select a bucket name from the drop-down list. In this example, we selected user.docs:



A message indicates that any compliance settings (as described in "Enabling Compliance," page 2-25) will not be copied.

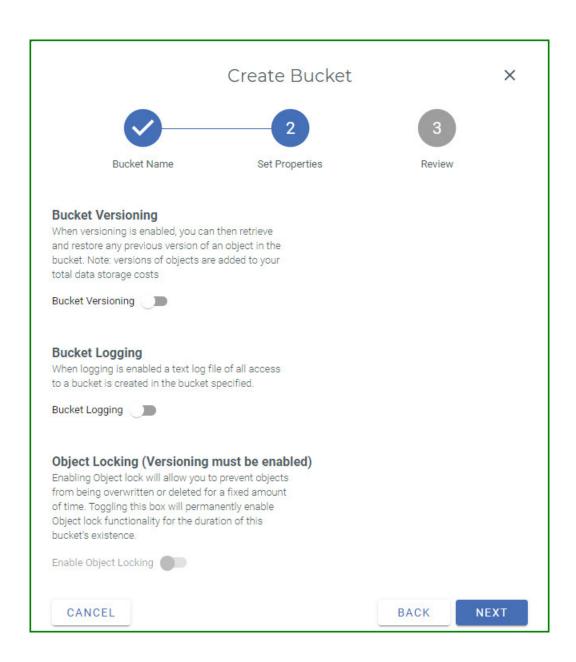
Click **CREATE BUCKET** to create the new bucket and end this procedure.

- 6 Click **NEXT**.
- Options are provided to set bucket versioning and/or logging options. By default, these features are suspended (*not* enabled.)

Optionally, enable bucket versioning. Every version of every object in the bucket will be stored. You can then retrieve and restore any version of an object in the bucket. This provides protection against inadvertent removal of an object (such as by overwriting or expiration).

Note: Use versioning cautiously because when versioning is enabled, different versions of all the objects in the bucket are saved. This means the costs could be very high, eventually, as versions are stored.

Optionally, enable bucket logging. A text log will be maintained of all access to the bucket. This provides details about the types of access requests made, request resources, and the date/time of processed requests.

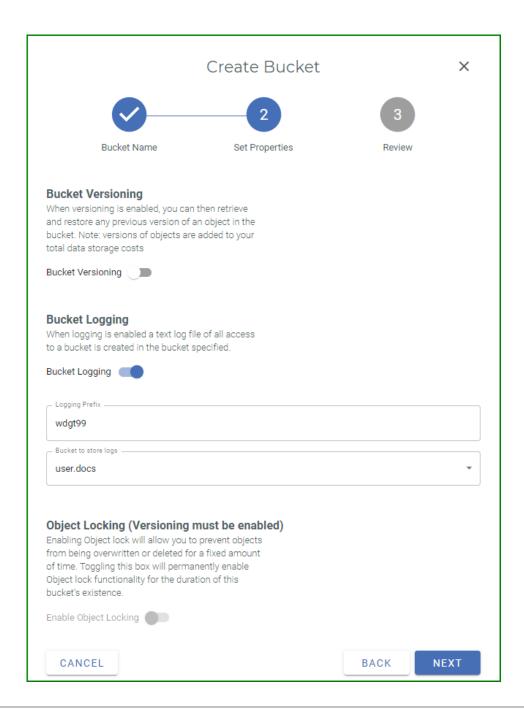


Note: Use logging cautiously because when logging is enabled, all log files are saved. This means the costs could be high, eventually, as log files are stored.

If you enable logging, you must enter:

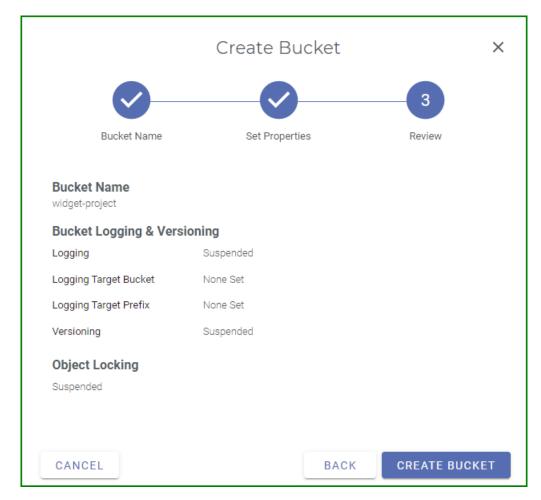
- A logging prefix to include in the log file name. Each log file will start with the characters you enter.
- The name of a bucket in which to store log files. Click the down arrow to select from a list of target buckets.

In the following example, log file names will begin with "wdgt99" and the files will be stored in the "user.docs" bucket.



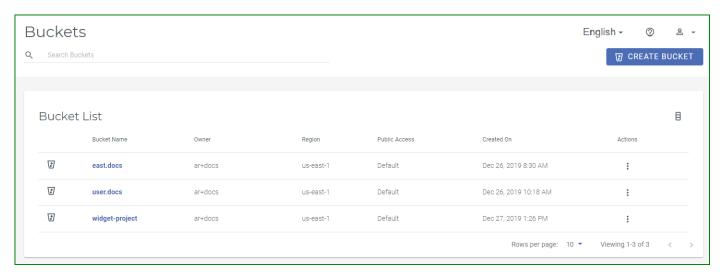
Click **NEXT**.

The bucket properties are displayed for your review. You can click **BACK** if you need to change any information. But, for this exercise, click **CREATE BUCKET** to accept the information and create the bucket.



A message displayed at the top of your screen indicates that the bucket was created successfully.

9 The new bucket is displayed on the Object Storage panel.



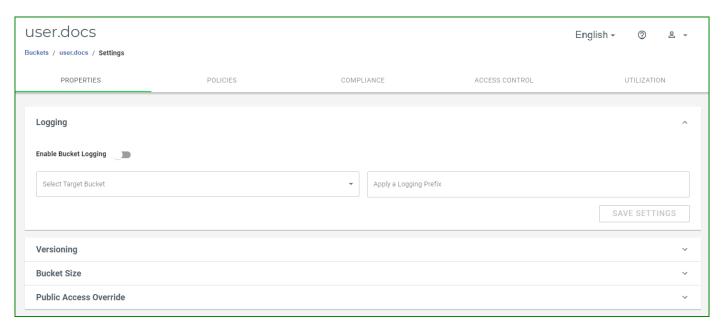
Each bucket is displayed with:

- Bucket name that, when clicked, provides access to object information (see "Storing Objects in a Bucket," page 2-39)
- Owner name, which is the name of the person who created the bucket
- Region in which the bucket was created
- Date/time when the bucket was created
- ◆ Public access status
- Options accessed with the icon in the Actions column to:
 - Change settings for versioning, logging, bucket privacy, bucket policy, compliance, and an access control list (ACL)
 - Rename the bucket
 - Delete the bucket

Click in the upper right corner of the panel to toggle the display of each column.

Working With Buckets

Click on the icon to access Settings options for a bucket. This example shows the Settings panel for the user.docs bucket.



Notice that there are five headings to access different panels of settings:

- PROPERTIES (displayed by default)
- POLICIES
- **◆** COMPLIANCE
- ◆ ACCESS CONTROL
- UTILIZATION

The following options are available on these panels:

- "Enabling/Disabling Bucket Logging," page 2-15. Logging creates a text log file of all access to the bucket. You can specify the target bucket in which to store log files as well as a prefix to include in the log file name.
- "Enabling/Disabling Bucket Versioning," page 2-16. Versioning is a way to maintain multiple variations of an object in the same bucket. You can then retrieve and restore any version of an object in the bucket. This provides protection against inadvertent removal of an object (such as by overwriting or expiration).
- "Reviewing the Bucket Size," page 2-17. You can download the bucket billing statistics as a CSV file.
- "Enabling/Disabling Public Access," page 2-18, to control bucket privacy. You can make a bucket public after confirming you understand that any Internet user will have access to the bucket and the ability to read objects from the bucket.
- ♦ "Working With a Bucket Policy," page 2-20. You can attach a policy to define the actions that can take place on a bucket and the conditions under which those actions can occur.
- "Enabling Compliance," page 2-25. Compliance features prevent the deletion of any objects and provides additional information to prove that the original data is not modified since the time it was stored.
- "Enabling Object Locking," page 2-27. Object Locking can help prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely.
- ◆ "Defining an Access Control List," page 2-36. An access control list (ACL) enables you to manage the users and groups that have access to buckets and objects.
- "Reviewing Bucket Utilization," page 2-36. A bucket utilization graph shows the total objects in a bucket as well as the deleted objects (calculated over the last 5 days).
- "Renaming a Bucket," page 2-37.
- "Deleting a Bucket," page 2-38.

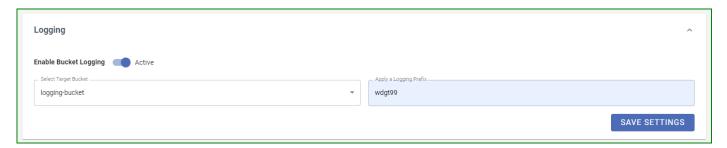
Enabling/Disabling Bucket Logging

Logging creates a text log file of all access to the bucket.

NOTE:

Use logging cautiously because when logging is enabled, all log files are saved. This means the costs could be high, eventually, as log files are stored. For additional information, refer to: wasabi.com/pricing.

- 1 Click for the bucket and click **Settings**.
- 2 On the PROPERTIES panel, open the **Logging** drop-down.
- 3 Slide to enable the **Enable Bucket Logging** option. The slide option appears blue: Active
- Enter the name of a **Target Bucket** in which to store log files. Click in this field to select from a list of buckets.
- 5 Enter a **Logging Prefix** to include in the log file name. Each log file will start with the characters you enter.



6 Click **SAVE SETTINGS** to confirm your settings.

Enabling/Disabling Bucket Versioning

Versioning is a way to maintain multiple variations of an object in the same bucket. When versioning is enabled, you can then retrieve and restore any version of an object in the bucket. This provides protection against inadvertent removal of an object (such as by overwriting or expiration).

NOTE:

Use versioning cautiously because when versioning is enabled, different versions of all the objects in the bucket are saved and added to your total data storage costs. This means the costs could be very high, eventually, as versions are stored. For additional information, refer to: wasabi.com/pricing.

- 1 Click for the bucket and click **Settings**.
- 2 On the PROPERTIES panel, open the **Versioning** drop-down.
- 3 Slide to enable the **Enable bucket versioning** option.
- **4** Review the note about versioning:



If you are sure you want to enable versioning for the selected bucket, click **TOGGLE**. The slide option appears blue:



When versioning is enabled, you can click in the upper right of the Objects list to toggle between displaying and hiding file versions in the list of objects. As described in "Storing Objects in a Bucket," page 2-39, objects in a bucket are listed with an icon that indicates the file type, such as for text , graphics , and media . The icon is if the file is a version.

Reviewing the Bucket Size

Statistics are provided for the selected bucket.

- 1 Click for the bucket and click **Settings**.
- 2 On the PROPERTIES panel, open the **Bucket Size** drop-down.
- 3 Review the bucket size.



4 Optionally, you can click **DOWNLOAD BILLING DATA** to download the bucket billing statistics as a CSV file.

Note: For a newly created bucket, this information is available for download only after at least one billing cycle.

Enabling/Disabling Public Access

Public access makes the bucket available to any Internet user. This includes the ability to read objects from the bucket.

Note:

Public use of a bucket, folder, or file is not allowed, by default, for trial accounts. Please contact Wasabi Support at support@wasabi.com for assistance.

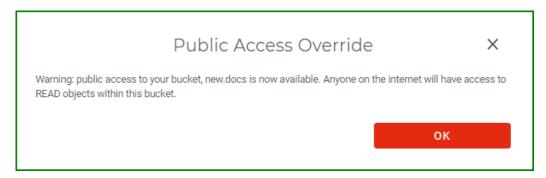
As a precaution, a bucket intended for public access must have an associated policy. The following is a sample policy that allows for public access of a bucket. Change the bucket name in the Resource section.

```
"Version": "2012-10-17",
"Statement": [
{
    "Sid": "AllowPublicRead",
    "Effect": "Allow",
    "Principal": {
    "AWS": ""
},
    "Action": [
    "s3:GetObject",
    "s3:ListBucket"
],
    "Resource": [
    "arn:aws:s3:::com-root1/"
]
}
]
}
```

- 1 To indicate that the bucket should have public access, click if for the bucket and click **Settings**.
- 2 On the PROPERTIES panel, open the **Public Access Override** drop-down.
- 3 Slide to enable the **Turn on override** option. This overrides policies related to permissions on the bucket and can give anyone on the Internet read access to it. Turn off the override if you want to return the bucket public access status to its default state.

4 Once the override is on, you can enable or disable public access to the bucket.

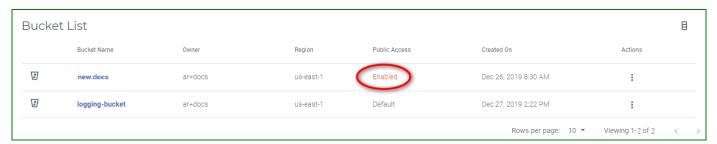
If you select the option to **Enable Public Access**, a message will remind you that public access to your bucket is available and anyone on the Internet will have access to read objects from the bucket.



Click **OK** to continue. (You can select the Disable Public Access option to reverse this action).



When public access is enabled, **Enabled** is shown for the bucket in the Public Access column on the Object Storage panel. Default is the status before the public access is changed. If you enable and then disable public access, the status changes to Disabled.



Working With a Bucket Policy

You can attach a policy to define the actions that can take place on a bucket and the conditions under which those actions can occur. In addition, you can edit an existing policy or delete it.

Defining a Bucket Policy

- 1 Click for the bucket and click **Settings**.
- 2 Click the **POLICIES** tab.
- 3 If a policy is not already defined for the bucket, the panel will appear as:



If the panel appears with a policy defined, you can edit it (see "Editing a Bucket Policy," page 2-25).

Note: You click **t**o copy the Amazon Resource Name (ARN) to the clipboard.

4 Enter code for the policy. For example:

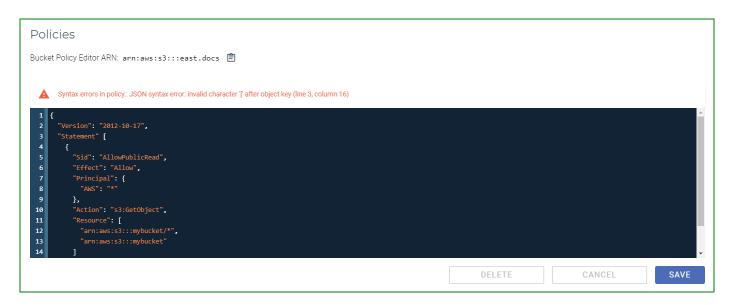
This policy makes the bucket and content public:

The following policy is an example for just allowing a specific IP address:

```
}
```

This policy grants permission to multiple accounts. In the example below, two accounts (arn:aws:iam::10000000164:root and arn:aws:iam::10000000162:root) are given access to objects under a bucket named multi-account.

Note that syntax errors will be flagged as you enter information. In this example, the colon (:) is missing after "Statement" in line 3:



5 When you see ✓ Policy is valid, you can click **SAVE** to create the policy.

Editing a Bucket Policy

If a policy exists for a bucket, you can edit it.

- 1 Click for the bucket and click **Settings**.
- 2 Click the **POLICIES** tab.
- 3 Edit the content of the policy, as required.
- 4 Click SAVE.

Deleting a Bucket Policy

If a policy exists for a bucket, you can delete it.

- 1 Click for the bucket and click **Settings**.
- 2 Click the **POLICIES** tab.
- 3 Click **DELETE**.

Enabling Compliance

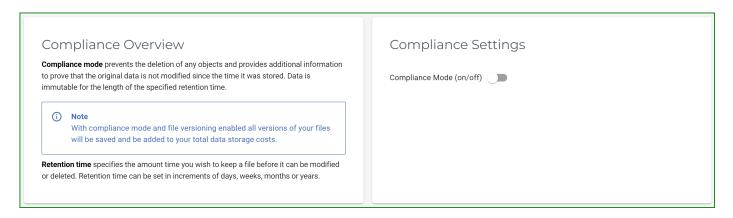
The Compliance feature prevents the deletion of any objects and provides additional information to prove that the original data is not modified since the time it was stored. The compliance feature may be required for certain regulatory needs, but it is also useful to prevent accidental deletion. You can lock compliance mode on to prevent disabling it. However, once it is locked on, compliance mode cannot be unlocked without the intervention of Wasabi Customer Support. This restriction is for your data protection as part of Wasabi's immutable bucket feature.

Use the compliance feature cautiously. Inappropriate use of this feature will restrict your ability to delete storage buckets and associated files, which will result in storage charges for these objects.

NOTE:

With compliance mode enabled, all versions of your files will be saved and added to your total data storage costs. For additional information, refer to: wasabi.com/pricing.

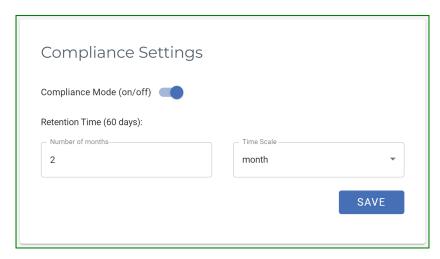
- 1 Click for the bucket and click **Settings**.
- 2 Click the **COMPLIANCE** tab. The Compliance panel is displayed. For example:



Note: Delete After Retention will not appear if it was enabled previously for a compliance-enabled bucket.

- Move the on/off slider to set compliance.

 When compliance is enabled, the slide option appears blue:
 When compliance is disabled, the slide option appears gray:
- 4 Enter the number of days/weeks/months/years (Time Scale) after which objects will be deleted automatically.



5 Click **SAVE**.

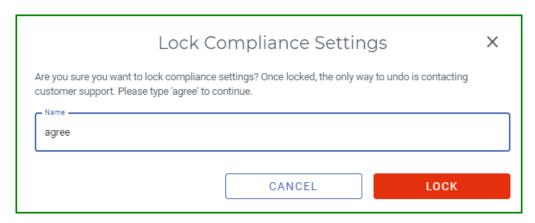
6 Optionally, you can lock compliance mode.

IMPORTANT:

Lock compliance mode after careful consideration. Once locked, the only way to unlock this mode is to contact Wasabi Support.

To lock compliance mode, click the **LOCK COMPLIANCE** button.

A confirmation message requests that you agree to the terms of locking compliance mode. Type the word "agree" to continue.



Click LOCK to confirm that you want to lock compliance mode.

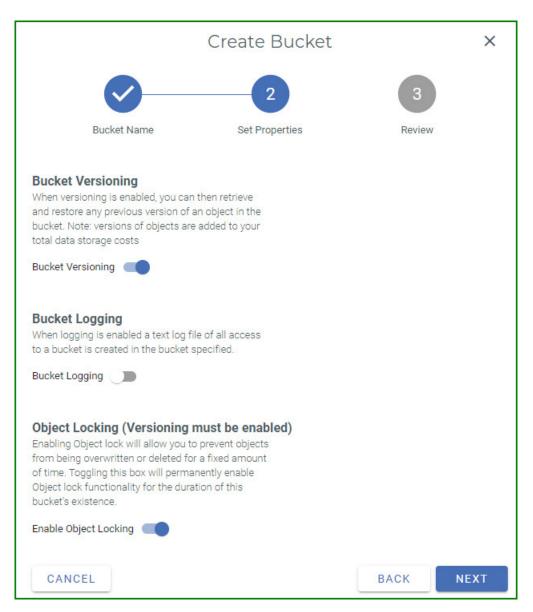
When compliance is locked, you must contact Wasabi Customer Support if you want to release the hold on the data.

Enabling Object Locking

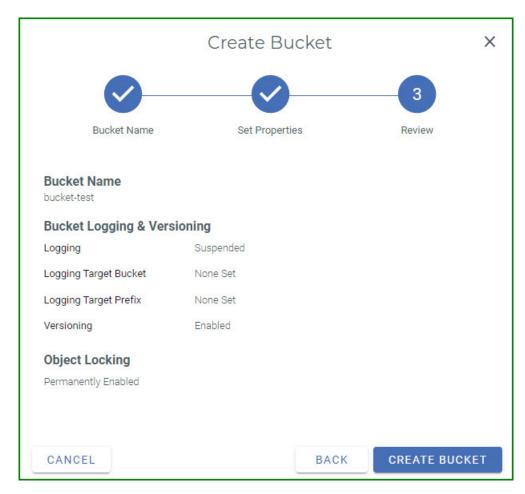
Object locking can help prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely. Before enabling this feature, versioning must be enabled on a bucket. Then, object locking can be enabled. Both steps are described below.

Note: Object locking can be enabled only while creating the bucket.

- 1 Toggle **Bucket Versioning** on the Create Bucket window.
- 2 Toggle Enable Object Locking.



3 Click **NEXT**. The following is displayed.



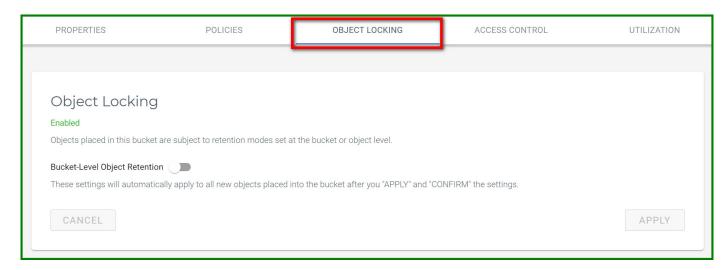
4 Click **CREATE BUCKET** to create a bucket with object locking enabled.

Note: Versioning must not be disabled on a bucket for which object locking is enabled. The following alert will display if you try to disable versioning.

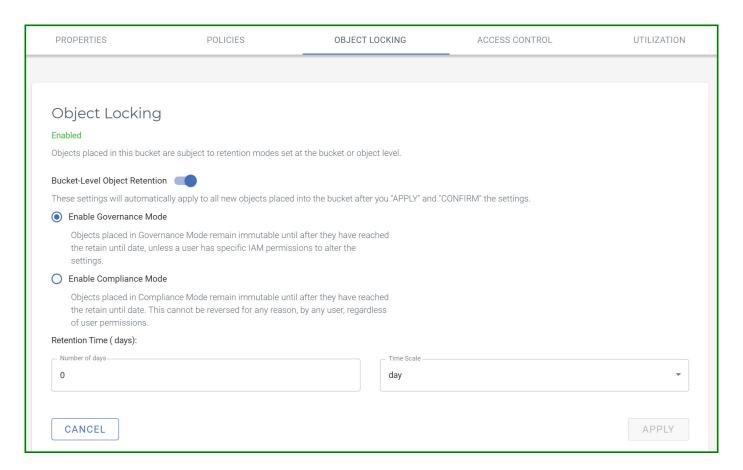


Setting Object Locking Defaults

When Object Locking is enabled for a bucket, the OBJECT LOCKING tab will be displayed on the settings page for the bucket.



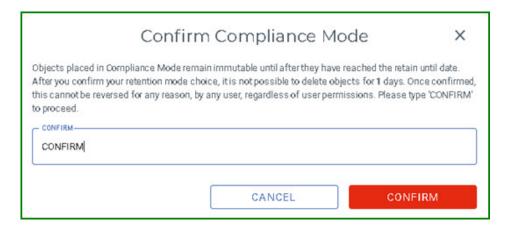
Toggle to enable **Bucket-Level Object Retention** to see the modes. By default, **Governance Mode** is enabled.



- Configure the **Retention Time** (Number of Days and Time Scale).
- 3 Click APPLY.

Note: When you update the retention time, it will apply to newly uploaded objects and not for existing objects.

4 Type **CONFIRM** and then click the **CONFIRM** button to save selected mode settings.



Note: If you attempt to rename an object that has an active retention, this alert is displayed: "Failed to rename."

To disable the bucket level object lock settings, toggle off the **Bucket-Level Object Retention** option and click **APPLY**.

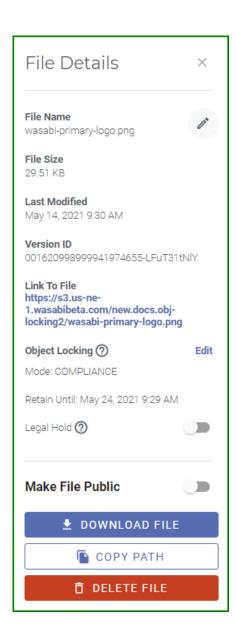
Viewing Object Lock Information for an Object

Note:

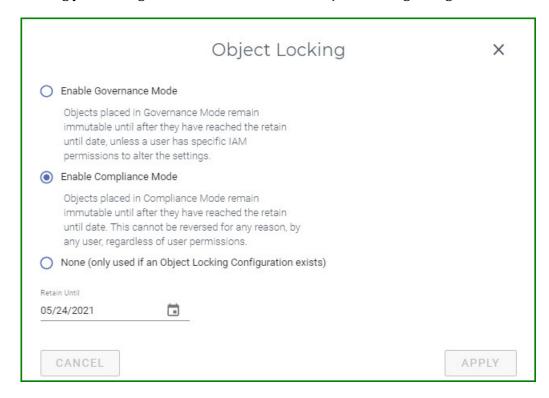
- 1 Click on the bucket.
- 2 Click the Bucket Versioning icon 🗖.
- 3 Click on any object.

If object locking is configured on either the bucket or object:

The "Mode," "Retain Until" date, and "Legal Hold" status are displayed.

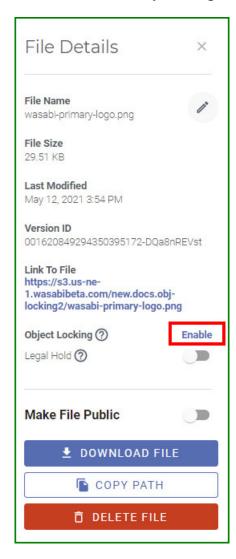


If you want to modify the "Mode" and/or "Retain Until" date, click **Edit** (to the right of Object Locking). After making your change, click **APPLY** to save the Object Locking changes.

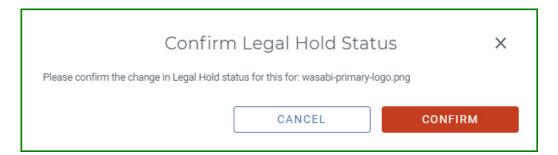


If object locking was not previously configured on the object:

You can click Enable (to the right of Object Locking) to set the "Mode" and "Retain Until" date for the object.



4 You can toggle the Legal Hold on or off for the object. When you toggle the Legal Hold, an alert will appear:



Click **CONFIRM** to apply the Legal Hold status change.

Defining an Access Control List

An access control list (ACL) enables you to manage the users and groups that have access to buckets and objects.

Access to buckets is best controlled with bucket policies, as described in Chapter 3, Policies.

Reviewing Bucket Utilization

A bar graph shows account utilization (calculated over 5 days) with total objects represented in green and deleted objects in blue.

- 1 Click for the bucket and click **Settings**.
- **2** Click the **UTILIZATION** tab. A bar graph is displayed. For example:



You can hover over the graph to see the total storage (in bytes) and amount deleted on a specific day.

Renaming a Bucket

- 1 Click for the bucket.
- **2** Click the **Rename** tab.
- **3** Enter a new bucket name.
- 4 Click RENAME BUCKET.

Note: If you attempt to rename an Object Lock bucket, this alert is displayed: "Failed to rename bucket."

Deleting a Bucket

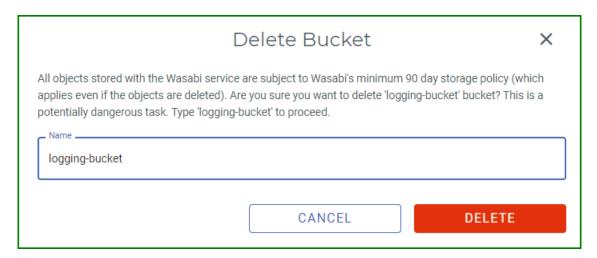
A bucket must be empty before you can delete it.

NOTE:

When you delete a bucket, all objects stored with the Wasabi service are subject to Wasabi's minimum storage policy, which applies even if the bucket is deleted. For additional information, refer to: wasabi.com/pricing.

- 1 Click for the bucket.
- Click the **Delete** tab. The Retention panel is displayed. For example:
- A message asks you to confirm that you want to delete the bucket. Do so cautiously because deleting a bucket removes all objects stored in the bucket.

Type the name of the bucket (such as **logging-bucket** in the example below) to proceed.



4 Click **DELETE** if you are sure you want to delete the bucket (otherwise, click **CANCEL**).

Note: Bucket log files that are mapped from other buckets will be deleted if configured already.

Note: You cannot delete non-empty compliance buckets.

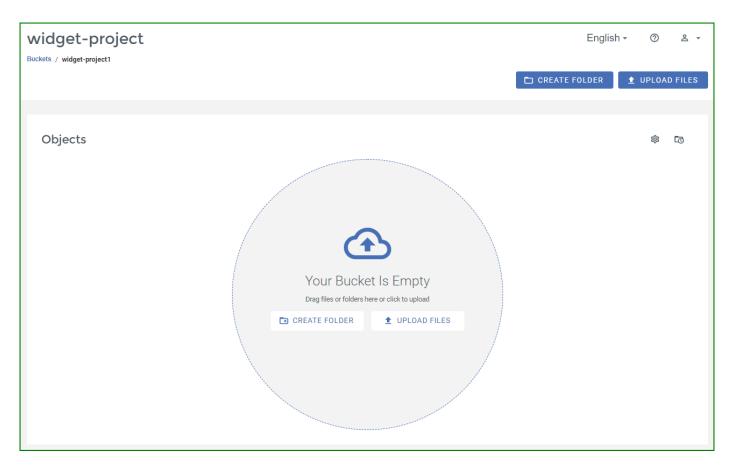
Storing Objects in a Bucket

You can store objects in a bucket in Wasabi. An object can be any type of file—text, photo, video, etc.

In the Bucket list, click the bucket name (as circled below) into which you want to upload an object.

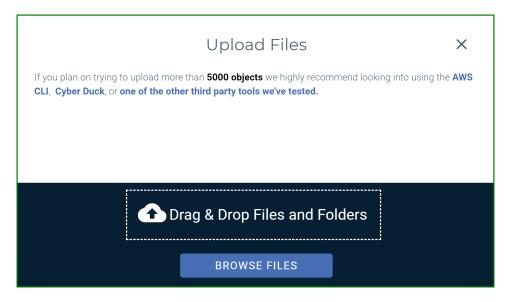


The bucket content panel is displayed. If your bucket already holds objects, the panel will list the object names and associated information (as you will see later in this procedure). If your bucket is empty, you will see a panel such as:



2 Click **UPLOAD FILES**.

3 The Upload Files window is displayed.



You can upload files and folders in two different ways:

- Drag and drop files and folders onto the Drag & Drop Files and Folders area of the panel. (Continue with Step 4.)
- ◆ Upload a file(s) by clicking the **BROWSE FILES** button. Then, navigate to find the file(s) you want to upload. You can use the Shift or Ctrl keys to select multiple files. (Continue with Step 4.)

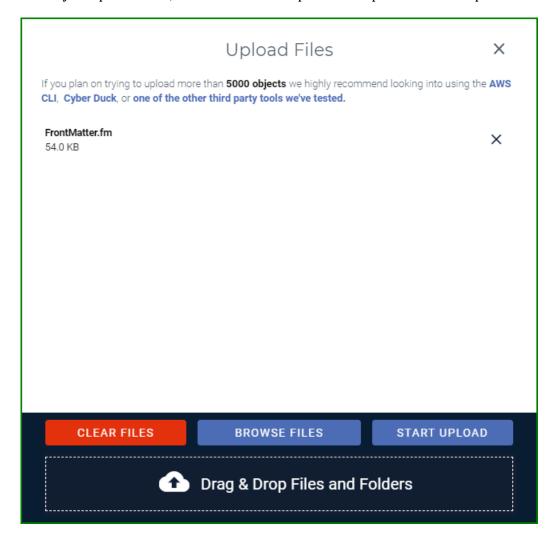
If you choose the same file name from different folders, Wasabi will store the file chosen last before the upload starts.

Note: Avoid the use of the following special characters in a file name:

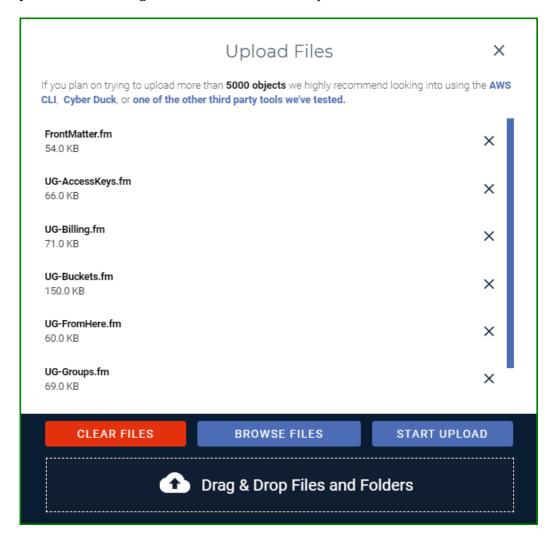
- % (percent)
- < (less than symbol)
- > (greater than symbol)
- \ (backslash)
- # (pound sign)
- ? (question mark)

Note: After you initiate the upload, you will see an alert that indicates the objects are attaching and you should wait until this is done.

When you upload a file, it is listed on the Upload Files panel. For example:



When you upload multiple files, all files are listed and a scroll bar appears to the right of the files, enabling you to scroll through the file names. For example:



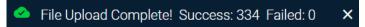
NOTE: To remove a file from the list before uploading, click **X** to the right of the file name. To remove all selected files before uploading, click **CLEAR FILES**.

4 Click **START UPLOAD** to upload the objects. A check appears to the right of each file name when it is successfully uploaded.

Note: To remove a file from the list after you start uploading, click Abort to the right of the file name.

When the upload is complete, you are returned to the Upload Files panel where you can repeat these steps to upload additional folders or files. For now, close the Upload Files window by clicking X

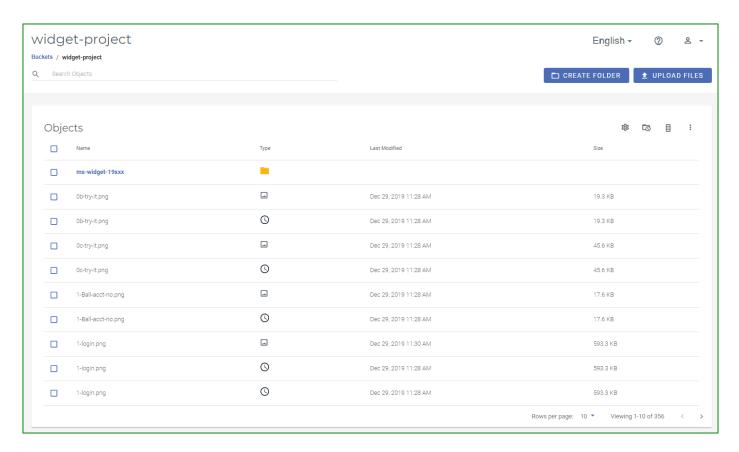
A message at the bottom of the Object Storage panel indicates the upload status. For example:



Note: When the file upload is in progress, you can minimize the Upload Files window by clicking the X in the upper right corner. When the Upload Files window is minimized and an upload is in progress, you can navigate to all pages, except Billing.

Note: The message, Network Failure, is displayed if the network is interrupted during an upload.

Uploaded files are listed on the Object Storage panel. The following example shows multiple files stored in the widget-project bucket.



Folders and files are displayed with a Name, Type, Last Modified (date), and Size. You can click the column heading to sort the listing by:

- Name—number and then alphabetically (a to z) or reverse.
- Last Modified—oldest to newest date, or newest to oldest.
- ♦ Size—smallest size to largest, or largest to smallest.

Folders

Each folder is displayed with:

- Folder select icon.
 - enables you to select one or more folders to delete, make public, or make private. Refer to "Working With Multiple Folders and/or Files," page 2-48.
- Folder name.
- Folder type (details).

Click to display folder details (see "Reviewing Folder Details," page 2-51).

The Last Modified and Size columns are left blank intentionally.

Files

Each file is displayed with:

- File select icon.
 - enables you to select one or more files to delete, make public, or make private. Refer to "Working With Multiple Folders and/or Files," page 2-48.
- File name.
- File type.

Icons indicate the file type, such as for text , graphics , and media . The icon is if the file is a version. Click the icon to display file details (see "Reviewing File Details," page 2-53).

- Date/time when the file was last modified.
- ◆ Size of the file.

In addition, notice the icons in the upper right part of the objects list:

accesses the bucket Settings panel with options for "Working With a Bucket Policy" (page 2-20), "Enabling Compliance" (page 2-25), and "Defining an Access Control List" (page 2-36).

toggles between hiding and showing file versions if versioning is enabled. The version icon to the right of the file name indicates the file is a version. This tool is not available if a folder is empty.

- enables you to toggle the display of each column. This tool is not available if a folder is empty.
- provides more options for:
- "Deleting One or More Folders or Files," page 2-49
- "Making Folders and/or Files Public," page 2-49
- "Making Folders and/or Files Private," page 2-50

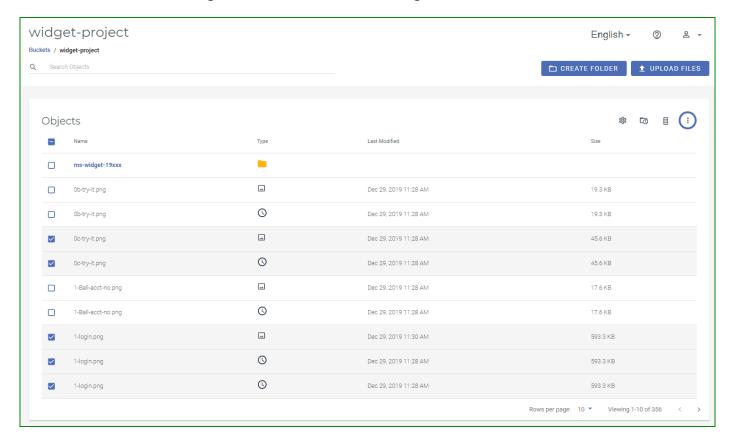
These options are not available if a folder is empty.

Working With Multiple Folders and/or Files

You can select one or more folders or files to delete or make public/private.

Note: Public use of a bucket, folder, or file is not allowed, by default, for trial accounts. Please contact Wasabi Support at support@wasabi.com for assistance.

Select folders or files to change. The select icon \square will change to a check mark \square .



Notice that a blue circle highlights the button for more options

NOTE:

The Rename and Download As options are not available for multiple files. You can rename/download only one file at a time.

Deleting One or More Folders or Files

You can easily remove one or more folders or files (or all folders and files) from a bucket. All objects in a folder are deleted when the folder is deleted.

NOTE:

When you delete a file or folder, all objects stored with the Wasabi service are subject to Wasabi's minimum storage policy, which applies even if the objects are deleted. For additional information, refer to: wasabi.com/pricing.

- 1 Select the folder(s) and/or file(s): You can click the select icon in the list header to select all folders and files.
- 2 Click .
- 3 Select **Delete**.
- 4 A message reminds you of the Wasabi storage policy and asks you to confirm that you want to delete the folder(s) and/or file(s). Click **DELETE** to confirm.

Making Folders and/ or Files Public

You can make one or more folders and/or files (or all folders and files) available so that anyone can access them through the Internet without permissions from these URLs:

- [bucketname].[serviceURL]/[path/filename]
- [serviceURL/[bucketname]/[path/filename]

Refer to the Wasabi Knowledge Base for service URLs for different regions.

- 1 Select the folder(s) and/or file(s): You can click the select icon in the list header to select all folders and files.
- 2 Click

3 Select Make Public.

When you make a folder public with this option, all files in the folder are made public. This feature is intended as a one-time setting, which overrides the status settings for individual files within the folder. If files are later uploaded into the folder, they are automatically uploaded as private. You may want to consider using a bucket policy to automatically set the status of files to be public ("Working With a Bucket Policy," page 2-20).

You can change the status of a folder or file with an option on the Folder or File Details panel ("Reviewing Folder Details," page 2-51, and "Reviewing File Details," page 2-53).

Making Folders and/ or Files Private

If one or more folders and/or files (or all folders and files) have been made public, you can change the status to private.

NOTE:

While Wasabi enables you to select multiple objects and make all selections private, Amazon Web Services (AWS) does not support this feature.

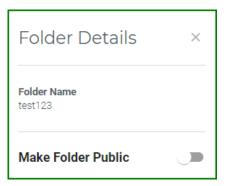
- 1 Select the folder(s) and/or file(s): You can click the select icon in the list header to select all folders and files.
- 2 Click
- 3 Select Make Private.

When you make a folder private with this option, all files in the folder are made private. This feature is intended as a one-time setting, which overrides the status settings for individual files within the folder. If files are later uploaded into the folder, they are automatically uploaded as private. You may want to consider using a bucket policy to automatically set the status of files to be private ("Working With a Bucket Policy," page 2-20).

You can change the status of a folder or file with an option on the Folder or File Details panel ("Reviewing Folder Details," page 2-51, and "Reviewing File Details," page 2-53).

Reviewing Folder Details

1 Click the folder icon to view details about a folder.



2 Click **X** to close the Folder Details panel.

Making a Folder Public or Private

You can make a folder (and all files within the folder) available so that anyone can access it through the Internet without permissions from these URLs:

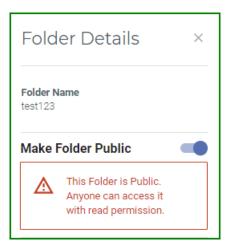
- [bucketname].[serviceURL]/[path/filename]
- [serviceURL]/[bucketname]/[path/filename]

Refer to the Wasabi Knowledge Base for service URLs for different regions.

- 1 Click the folder icon
- On the Folder Details panel, slide to enable the **Make Folder Public** option.
- You may see a message indicating that making large quantities of objects public (or private) can be inefficient. If you plan to modify more than 10,000 objects, Wasabi recommends that you use a bucket policy or update ACLs using the CLI. Click **CONTINUE** after considering this warning.

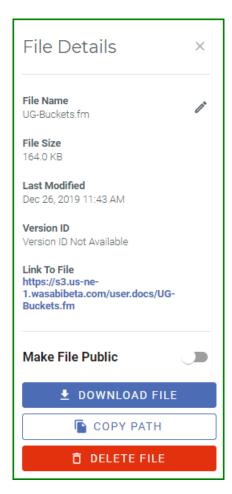
If you are making the folder public, another warning is displayed. It indicates that the selected objects will be public and accessible by anyone who has Read permissions. Click **OK** to accept this condition.

When a folder is public, the Folder Details appears as:



Reviewing File Details

1 Click anywhere (except \square) in the row of the file for which you want details.



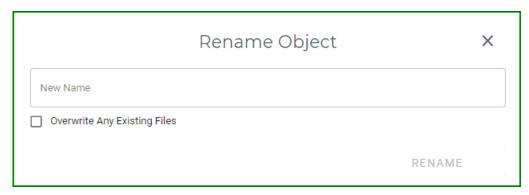
You can review the file details (file name, size, date/time last modified, and version identification number if versioning is enabled). In addition, tools are provided for:

- "Renaming a File," page 2-54
- ◆ "Making a File Public or Private," page 2-55
- ♦ "Linking to a File," page 2-55
- ♦ "Downloading a File," page 2-55
- ◆ "Copying the File Path," page 2-56
- "Deleting a File," page 2-56
- Click **X** to close the File Details panel.

Renaming a File You

You can change the name of a file.

- 1 On the File Details panel, click to the right of the file name on the File Details panel.
- **2** Enter a new name for the file.



Note: Avoid the use of the following special characters in a file name:

% (percent)

- < (less than symbol)
- > (greater than symbol)

\ (backslash) # (pound sign)

? (question mark)

- 3 Optionally, check the box to overwrite any existing file that uses the name to which you are renaming.
- 4 Click **RENAME**.

Making a File Public or Private

You can make a file available so that anyone can access it through the Internet without permissions from these URLs:

- [bucketname].[serviceURL]/[path/filename]
- [serviceURL]/[bucketname]/[path/filename]

Refer to the Wasabi Knowledge Base for service URLs for different regions.

On the File Details panel, slide to enable the **Make File Public** option. When a file is public, that section of the File Details panel appears as:



Linking to a File

You can link to a file at its Internet location.

On the File Details panel, click the link under the Link To File heading.

Downloading a File

You can download a file to your local computer.

On the File Details panel, click the **DOWNLOAD FILE** button. The file is downloaded and ready to open, save, etc.

Copying the File Path

You can copy a file path to the clipboard.

On the File Details panel, click the **COPY PATH** button. A message under the **COPY PATH** button indicates that the object path is copied to the clipboard.

Deleting a File

You can easily remove a file from a bucket.

NOTE:

When you delete a file, all objects stored with the Wasabi service are subject to Wasabi's minimum storage policy, which applies even if the objects are deleted. For additional information, refer to: wasabi.com/pricing.

NOTE:

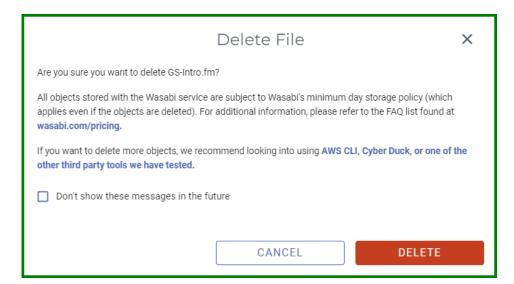
You cannot delete a file from a compliance bucket.

On the File Details panel, click the **DELETE FILE** button.

NOTE:

The **DELETE FILE** button deletes only the file listed on the File Details panel. If you want to select multiple files for deletion, use the Delete option on the More Options menu (see "Deleting One or More Folders or Files," page 2-49).

2 A message prompts you to confirm that you want to delete the file indicated in the message.



Click **DELETE** if you are sure you want to delete the file.

3 Policies

Each user and group can be associated with one or more *policies* to define the actions that a user or group member can perform and the conditions under which those actions can take place. You can attach a policy to a user, group, and/or role.

You can create up to 1000 policies per account.

Note: You can attach a policy to a bucket. This is described in "Working With a Bucket Policy," page 2-20.

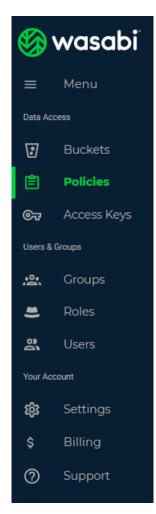
Wasabi provides predefined policies that you can attach to a user, group, and/or role. These policies are:

- AmazonS3Full Access—Gives full access to all S3 resources, but no IAM access.
- AmazonS3ReadOnlyAccess—Gives just the Get and List permissions on any S3 resource/bucket, but no IAM access.
- ♦ AdministratorAccess—Gives full access to all resources (IAM and S3) with no limitation whatsoever.
- WasabiReadOnlyAccess—Gives just the Get and List permissions to all S3 resources and login permissions to users.
- WasabiWriteOnlyAccess—Gives just the Put and MultipartAbort permissions to all S3 resources, but no IAM access. The user cannot sign in with just this policy attached.
- WasabiFullAccess—Gives full permissions to all S3 resources and sign in permissions to users.

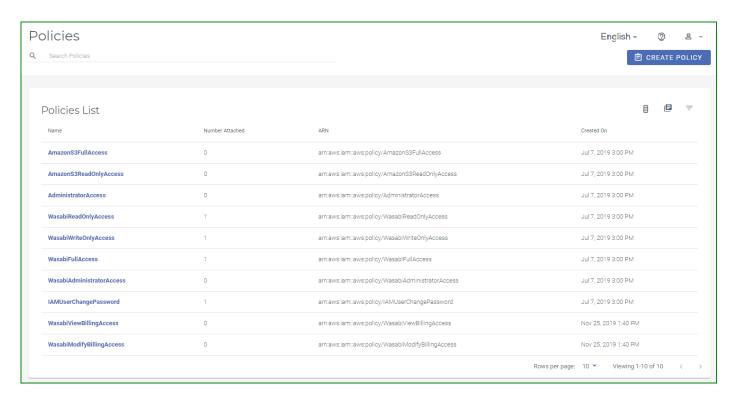
- WasabiAdministratorAccess—Gives full access to all resources (IAM and S3) with no limitation whatsoever. This is similar to AdministratorAccess, above.
- IAMUserChangePassword—Gives the user permission to change his/her password upon initial sign in.
- WasabiViewBillingAccess—Gives the user permission to view the billing access portal.
- WasabiModifyBillingAccess—Gives the user permission to modify the billing access portal.

Reviewing the Policies Panel

Click **Policies** in the Wasabi menu on the left of the screen.



The Policies panel is displayed:



The Policies panel displays a list of policies, each with this information:

- Policy name
- Number of users, groups, and/or roles attached to the policy
- Amazon Resource Name (ARN) for the policy
- Date when the policy was created

Tools at the top of the Policies panel are provided for:

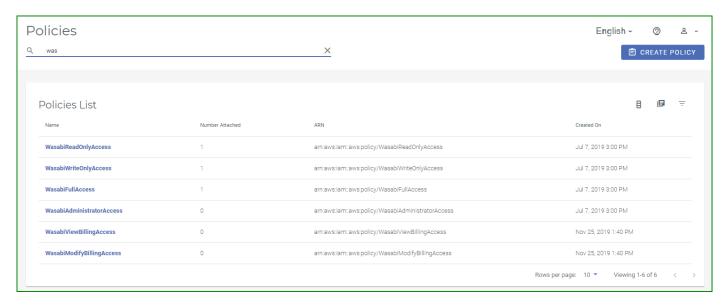
- "Searching for a Policy," page 3-5
- "Toggling the Display of Policies List Columns," page 3-6
- "Toggling the Display of Attached Policies," page 3-6

- "Filtering the Policies List," page 3-6
- "Creating a Policy," page 3-7

In addition, you can review and edit the details of a policy, as described in "Reviewing Details and Editing an Existing Policy," page 3-17.

Searching for a Policy

- 1 Click in the Search Policies area.
- 2 Enter a text string for which to search.
- 3 Press the **Enter** key. Policies with names that include text that matches the string are displayed. For example:



Note that the text string might appear anywhere in the name and letters for the text are not case-sensitive.

Toggling the Display of Policies List Columns

You can turn on/off the display of the Policies List columns. Click and then check to indicate columns you want to display:

- Number Attached
- Default Version
- Path
- ARN
- Created On

Toggling the Display of Attached Policies

Click to turn on/off the display of policies that are attached to users, groups, and/or roles.

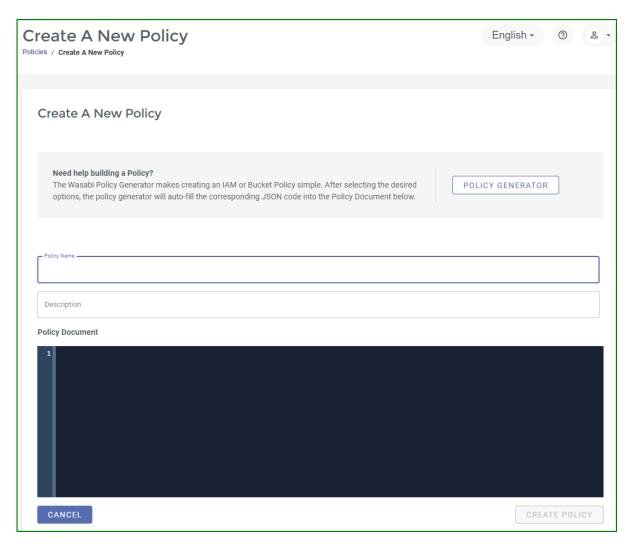
Filtering the Policies List

You can filter the policies list to display. Click and then select the filter options:

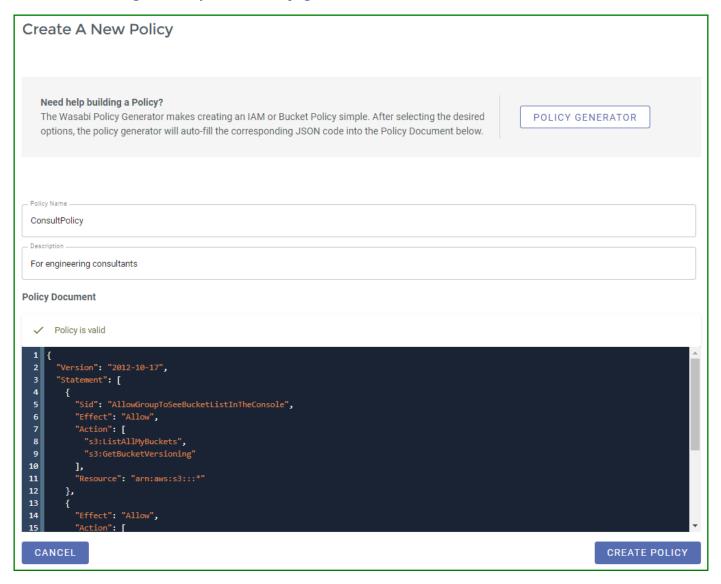
- Global Policies, as supplied by Wasabi.
- User Created Policies

Creating a Policy

- 1 Click the **CREATE POLICY** button.
- 2 Enter a policy name and, optionally, a description.



You can enter code for the policy, as shown in the example below. Or, you can use the Policy Generator, as described in "Using the Policy Generator," page 3-13.



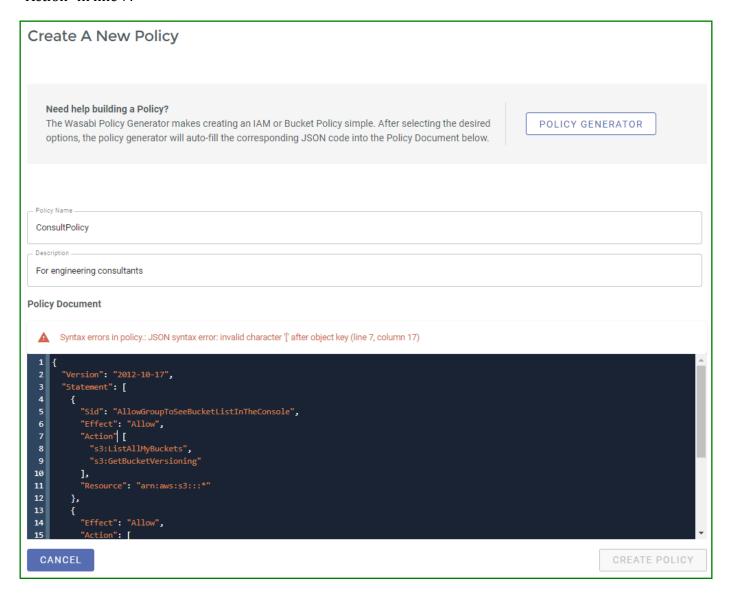
With a user policy, you can control user access to buckets. In the following example, two users (Alice and Bob) belong to a common group called Consultants. Alice has access to only one bucket named bucket1. Bob has access to only one bucket named bucket2. Three policies are created to achieve this: one policy is attached to the group, one is attached to Alice, and one is attached to Bob.

The Group policy is:

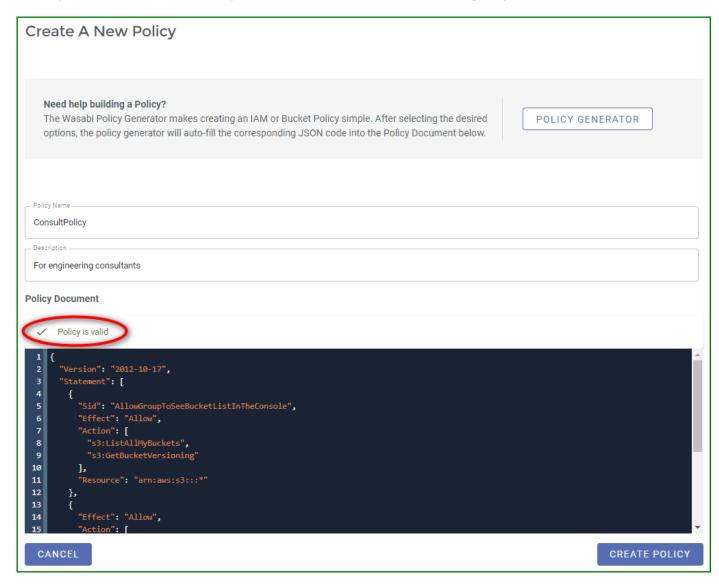
```
"Version": "2012-10-17",
     "Statement": [
         "Sid": "AllowGroupToSeeBucketListInTheConsole",
         "Effect": "Allow",
         "Action": [
           "s3:ListAllMyBuckets",
           "s3:GetBucketVersioning"
         "Resource": "arn:aws:s3:::*"
       },
         "Effect": "Allow",
         "Action": [
            "iam:Get*".
           "iam:List*"
           "iam:ChangePassword",
           "iam:UpdateLoginProfile",
           "iam: *MFA * ",
            "sts:Get*"
         "Resource": "arn:aws:iam::${aws:accountid}:user/${aws:username}"
The Alice policy is:
     "Version": "2012-10-17",
     "Statement": [
         "Sid": "AllowAccessToBucketNamedBucket1",
         "Effect": "Allow",
         "Action": [
```

```
"s3:ListBucket",
           "s3:GetObject",
           "s3:PutObject",
           "s3:GetObjectAcl",
           "s3:PutObjectAcl",
           "s3:DeleteObject"
         "Resource": [
           "arn:aws:s3:::bucket1",
           "arn:aws:s3:::bucket1/*"
The Bob policy is:
     "Version": "2012-10-17",
     "Statement": [
         "Sid": "AllowAccessToBucketNamedBucket2",
         "Effect": "Allow",
         "Action": [
           "s3:ListBucket",
           "s3:GetObject",
           "s3:PutObject",
           "s3:GetObjectAcl",
           "s3:PutObjectAcl",
           "s3:DeleteObject"
         "Resource": [
           "arn:aws:s3:::bucket2",
           "arn:aws:s3:::bucket2/*"
```

Note that syntax errors will be flagged as you enter information. In this example, the colon (:) is missing after "Action" in line 7:



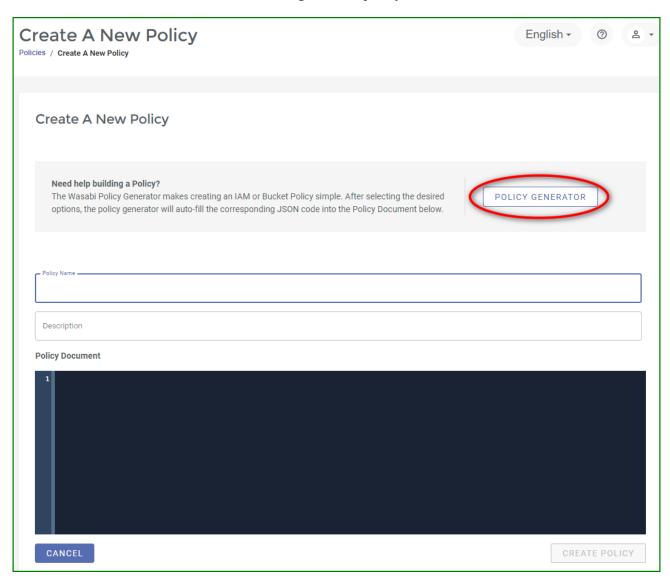
When you see ✓ Policy is valid, you can click **SAVE** to create the new policy.



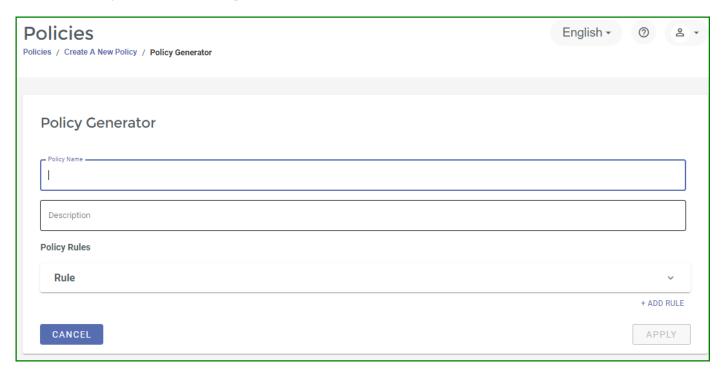
Using the Policy Generator

The Policy Generator enables you to create a policy with conditions using simple user interface controls.

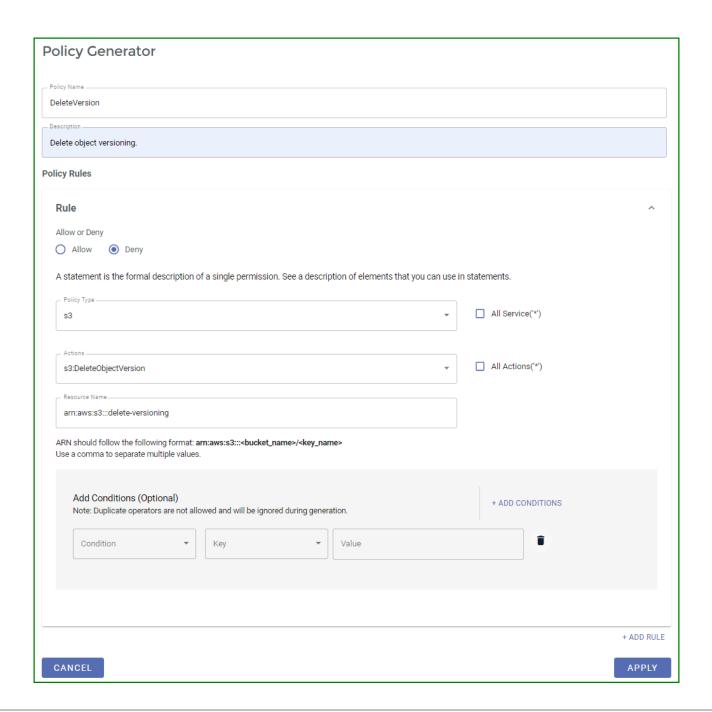
1 Click the **POLICY GENERATOR** button to begin a new policy creation.



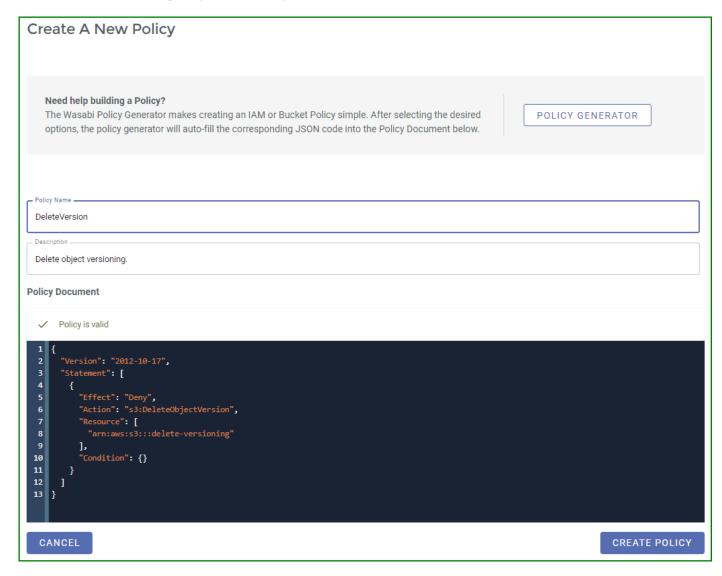
2 Enter the Policy Name and Description.



- 3 Click **Rule** and then enter information for the rule.
- 4 Optionally, you can add conditions using the **Condition** and **Key** drop-downs as well as the **Value** field.
- Optionally, you can click + ADD RULE (above the APPLY button) to add additional rules for the policy.



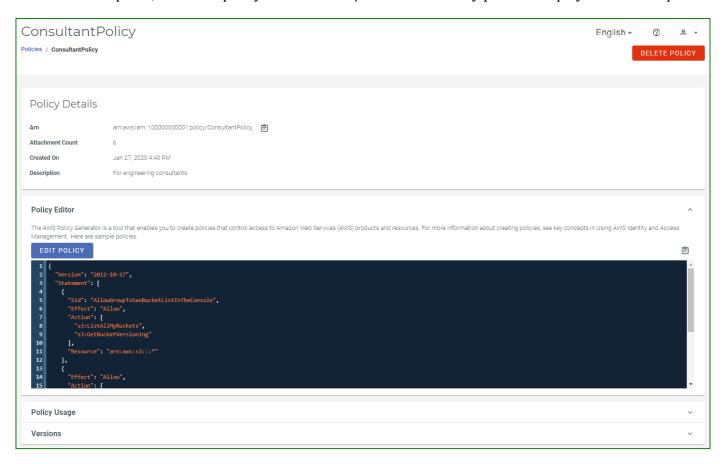
6 Click **APPLY** to see the policy in the Policy Document.



7 Click CREATE POLICY.

Reviewing Details and Editing an Existing Policy

On the Policies panel, click on a policy to review and/or edit. The Policy panel is displayed. For example:



This panel shows the policy name and includes:

- ◆ Arn—Amazon Resource Name for the policy. You can click to copy the Arn to the clipboard.
- Attachment Count—Number of users, groups, and/or roles attached to the policy.
- Created On—Date and time when the policy was created.

• Description—Optional descriptive information (entered when the policy was created).

The panel also includes drop-downs for:

- "Reviewing and Editing a Policy," page 3-18
- "Reviewing Policy Usage," page 3-21
- "Reviewing and Managing Policy Versions," page 3-22

Reviewing and Editing a Policy

The Policy Editor displays the policy content for your review. In addition,

• If it is a Wasabi-predefined Global Policy, you can click 📋 to copy the content to the clipboard.

• If the policy is user-created, you can edit or copy the content.

```
Policy Editor

The AWS Policy Generator is a tool that enables you to create policies that control access to Amazon Web Services (AWS) products and resources. For more information about creating policies, see key concepts in Using AWS identity and Access Management

EDIT POLICY

| Total Control of the Con
```

Copying Content

You can copy the content of a policy for use when creating another policy. Click to copy the content to the clipboard. Then, you can paste this content when "Creating a Policy," page 3-7.

Editing Content

- 1 Click **EDIT POLICY**. (This button is not available for predefined Global Policies.)
- 2 Edit the content of the user-created policy, as required.
- Both the original and new policy will be maintained as versions. You can check the **Save as default version** option to save the edited version as the new default.



4 Click **CREATE NEW VERSION**.

Reviewing Policy Usage

Click the **Policy Usage** drop-down to display the entities (users, groups, and roles) that are attached to a policy. For example:



This example show that there are 6 entities attached to the policy:

- ♦ 4 users
- ♦ 1 group
- ♦ 1 role

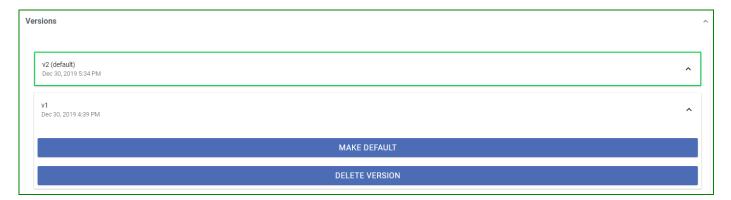
To detach an entity from the policy:

Click for the entity.

To attach an entity to a policy, you must edit the specific entity using the *Groups, Roles*, or *Users* tools, as appropriate.

Reviewing and Managing Policy Versions

Review and manage versions of a policy if the policy has been revised. In the example below, there are two versions of the policy. The original is outlined in green.



You can review or hide policy content.

Click ✓ to review the policy content for a version. Click ∧ to hide the content.

To manage policy versions, you can:

- ♦ Change the default version. Click **MAKE DEFAULT** to make a version the default policy.
- Delete a version. But do so cautiously because as soon as you click **DELETE VERSION**, it is removed.

Note: You can create a maximum of five policy versions, including the default, for user-created policies.

NOTE: You cannot create versions for a Wasabi predefined Global Policy.

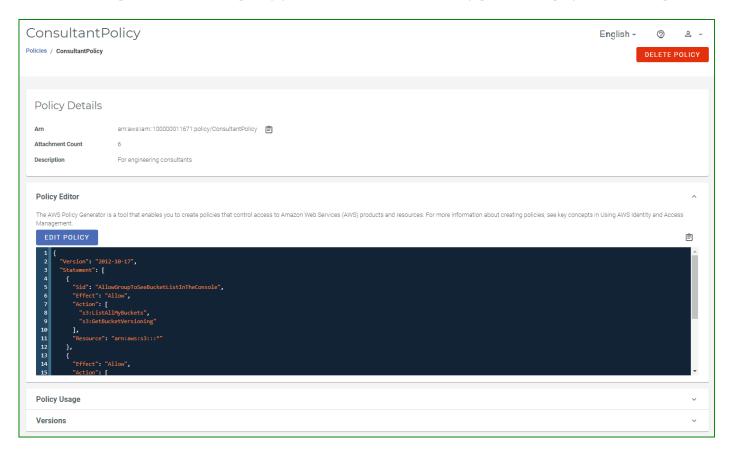
Deleting a Policy

To delete policy, you must first delete all versions of it (if versions exist). Refer to "Reviewing and Managing Policy Versions," page 3-22.

NOTE: You cannot delete a predefined Global Policy.

NOTE: You cannot delete a policy that is attached to a user, group, or role. To do so, first remove it from the user, group, and/or role and then delete the policy.

On the Policies panel, click on the policy you want to delete. The Policy panel is displayed. For example:



- 2 Click **DELETE POLICY**.
- A messages asks you to confirm that you want to delete the policy. Click **DELETE** to do so (otherwise, click **CANCEL**).

4 Access Keys

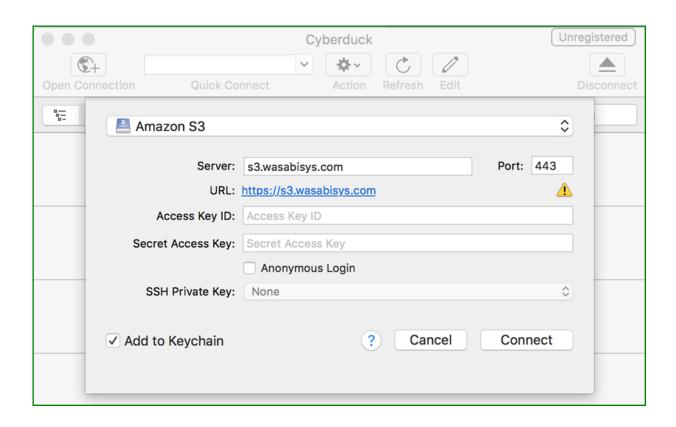
An access key is for use with third-party applications. An access key is used to make programmatic calls to AWS API actions. There are two types of access keys:

- Access Key ID
- Secret Access Key

For your protection, you should never share your secret keys with anyone. In addition, industry best practice recommends frequent key rotation.

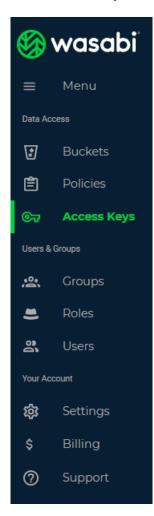
This chapter describes how you can assign an access key to a user.

Access keys are used to make secure REST or Query protocol requests to the Wasabi service API. The Wasabi S3 endpoint is **s3.wasabisys.com**. (See also to the Wasabi Knowledge Base for service URLs for different regions.) If using Cyberduck, for example as shown below, you would need to enter the appropriate keys in the "Access Key ID" and "Secret Access Key" fields. This is an example of one of many applications that can connect to the Wasabi endpoint.

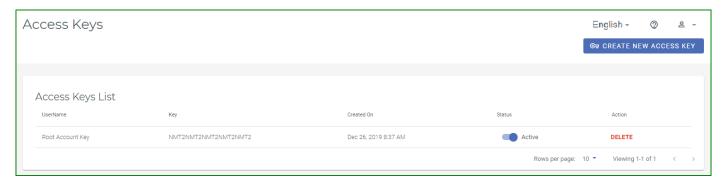


Reviewing the Access Keys Panel

Click **Access Keys** in the Wasabi menu on the left of the screen.



The Access Keys panel is displayed:



The Access Keys panel displays the access keys, each with this information:

- User name
- ♦ Key, which is the access key code
- Date/time when the access key was created
- Status of the access key
- Option to delete the access key

Tools are provided for:

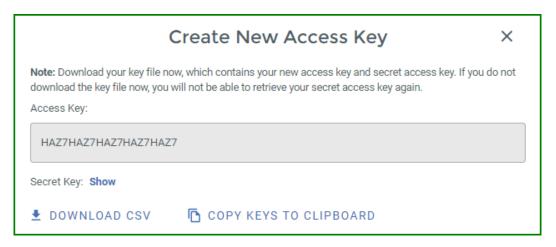
- "Creating a New Access Key," page 4-5
- "Changing the Access Key Status," page 4-6
- "Deleting an Access Key," page 4-7

Information in this chapter relates to access keys for the account. Refer also to the description of "Creating an Access Key for a User," page 8-19.

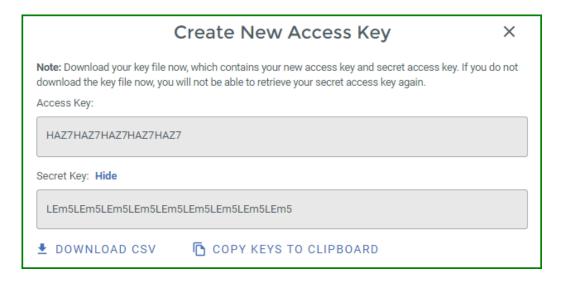
Creating a New Access Key

Note that an account can have only two access keys. If two are defined and you want to create another, you must delete one of the existing keys. Refer to "Deleting an Access Key," page 4-7.

1 Click **CREATE NEW ACCESS KEY**. A unique access key for the user is displayed.



To show the Secret Key, click the **Show** link. For example:



- Be sure to copy this key and store it is a safe place. Notice that two buttons are provided to conveniently download the keys as a CSV file or copy the keys to the clipboard (and then paste the text into a file to save).
- 4 After saving the keys, click \mathbf{X} .

Changing the Access Key Status

You can change the status of an access key from Active to Inactive.

To make the access key active, slide the option to the right. The slide option is blue: •• When the access key inactive, the option is gray: ••

Deleting an Access Key

- 1 Click **DELETE** to the right of the access key you want to delete.
- A message asks if you want to delete the access key. Click **DELETE** to confirm.

5 Groups, Roles, and Users

The Users & Groups section of the Wasabi menu enables you to manage groups, roles, and users.

A *user* is an individual for whom you create Wasabi authentication, giving that person permission to perform actions in Wasabi.

A *group* is a set of users that you can manage collectively.

Each user and group can be associated with one or more *policies* to define the actions that a user or group member can perform and the conditions under which those actions can take place.

A *role* is an identity with permission policies that determine what the role can and cannot do in Wasabi. A role can be associated with any user who needs that identity.

Because you assign a user to a group when you create a user account, you may want to start by "Creating a Group," page 6-4, and then work through "Creating a User," page 8-4, during which you will assign the user to the group and attach a policy.

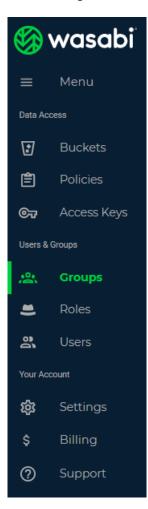
You can assign an access key to a user. An access key is for use with third-party applications.

6 Groups

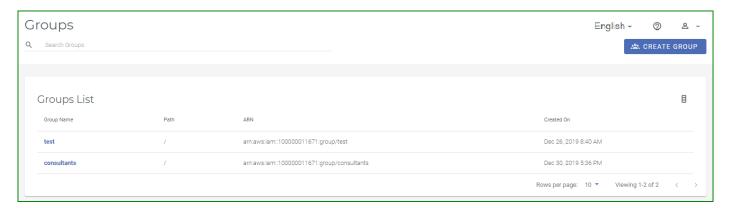
A *group* is a set of users that you can manage collectively. This chapter describes how to define a group. Then, you can assign a user to a group when you create a user account, as described in Chapter 8, *Users*.

Reviewing the Groups Panel

Click **Groups** in the Wasabi menu on the left of the screen.



The Groups panel is displayed:



The Groups panel displays a list of groups, each with this information:

- Group name
- Path for the group
- ◆ Amazon Resource Name (ARN) for the group
- Date when the group was created

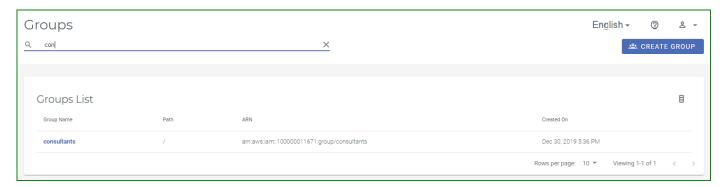
Tools at the top of the Groups panel are provided for:

- "Searching for a Group," page 6-4
- ◆ "Creating a Group," page 6-4

You can review and edit details, as described in "Reviewing Details and Editing an Existing Group," page 6-6.

Searching for a Group

- 1 Click in the **Search Groups** area.
- 2 Enter a text string for which to search.
- 3 Press the **Enter** key. Groups with names that include text that matches the string are displayed. For example:



Note that the text string might appear anywhere in the name and letters for the text are not case-sensitive.

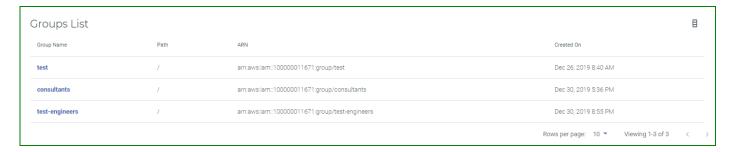
Creating a Group

- 1 Click **CREATE GROUP**.
- 2 Enter a name for the new group (such as "test-engineers" in the example below).

Note: The group name should be unique and not case-sensitive.

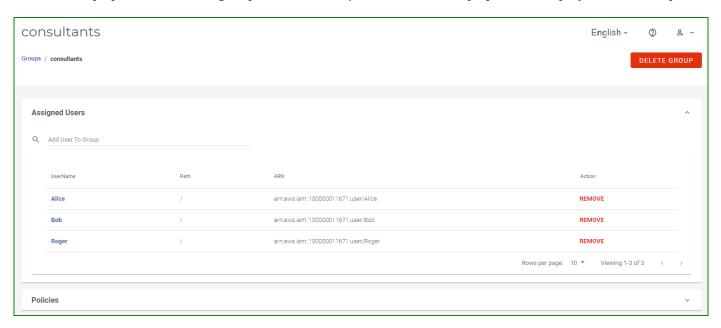


3 Click **SAVE**. The new group is displayed on the Groups panel. For example:



Reviewing Details and Editing an Existing Group

On the Groups panel, click on a group to review and/or edit. The Groups panel is displayed. For example:



The panel displays the following information associated with the group:

- "Users Assigned to the Group," page 6-7
- "Policies Associated with the Group," page 6-8

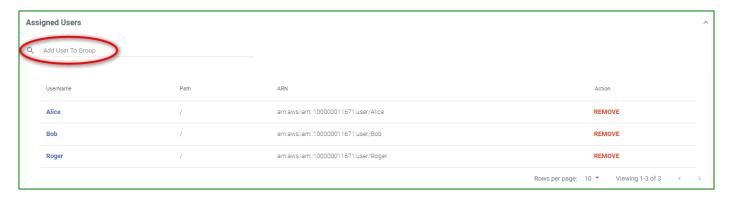
Users Assigned to the Group

This shows and enables you to modify the users associated with the group. This group has three users associated with it.



To add a user(s) to the group:

1 Click in the **Add User To Group** area.



2 Select a user from the drop-down. The user is added to the list.

To remove a user from the group:

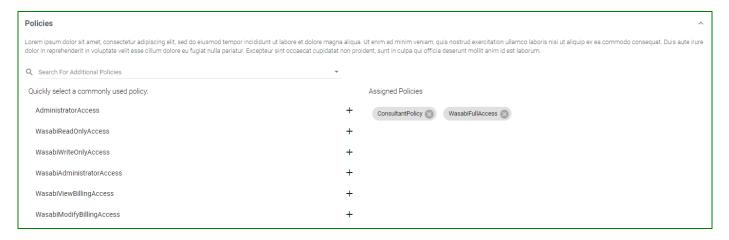
Click **REMOVE** for the user.

Policies Associated with the Group

You can associate policies with the group.

- 1 Click the Policies drop-down.
- 2 You can associate policies in two ways:
 - Click in the Search For Additional Policies area at the top of the panel. Select a policy from the dropdown.
 - ◆ Select one of the predefined policies listed on the left of the panel. Simply click on + to the right of the policy name. (Refer to Chapter 3, *Policies*, for more information about policies.)

Attached policies are listed on the right of the panel. For example, ConsultantPolicy and WasabiFullAccess are associated with this group:



To remove a policy from the group:

Click for the policy.

Deleting a Group

- 1 On the Groups panel, click on a group to delete.
- 2 Click **DELETE GROUP**.
- A messages asks you to confirm that you want to delete the group. This will detach all policies and remove all users. Click **DELETE** to do so (otherwise, click **CANCEL**).

7 Roles

A role is an identity with permission policies that determine what the role can and cannot do in Wasabi. A role can be associated with any user who needs that identity. For example, "contract engineer" may be a role. If Mary, Bob, Jennifer, and John are associated with that role, they would share in the permissions defined for the role of "contract engineer."

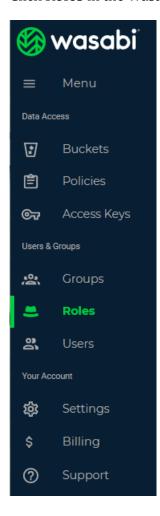
You can create up to 250 roles per account.

Roles help to prevent accidental access to or modification of resources. You can give a user permission to switch roles created within your Wasabi account or another account. In this way, the user can switch roles, use the Wasabi Management Console with permissions that he or she does not normally have, and then exit from the role to surrender the permissions. A role might grant a user in one Wasabi account access to resources in another account. Or, given a specific role, a user might have access to resources typically not available to the user. For example, the person who normally functions as a contract engineer, might need to access schematic drawings and can switch to the "engineer-schematics" role to do so.

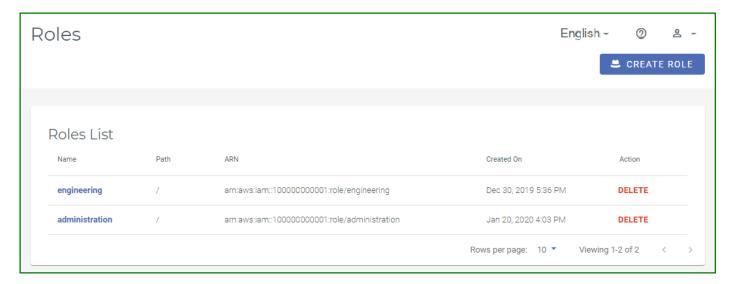
Note: A role is not associated with a password or access keys.

Reviewing the Roles Panel

Click **Roles** in the Wasabi menu on the left of the screen.



The Roles panel is displayed:



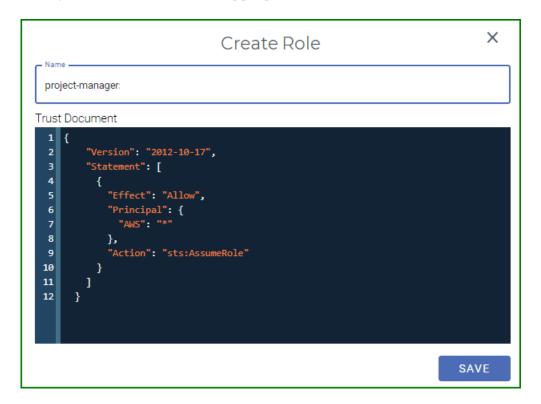
The Roles panel is a list of roles, each with this information:

- Role name
- ◆ Path for the role
- Amazon Resource Name (ARN) for the role
- Date when the role was created
- Action that you can take on a role

After "Creating a Role," page 7-4, you can review and edit details, as described in "Reviewing Details and Editing an Existing Role," page 7-7.

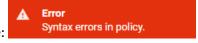
Creating a Role

- 1 Click **CREATE ROLE**.
- Enter a role name. It can contain only alphanumeric characters and the following special characters: plus sign (+), equal sign (=), period (.), ampersand (@), dash (-), underscore (_).
- 3 Modify the code for the role, as appropriate.



4 Click **SAVE** to create the new role.

Note that syntax errors will be flagged with a message if you try to save:



Creating a Role for Single Sign On

If you are configuring the Single Sign On (SSO) feature (as described in "Configuring the Single Sign On (SSO) Feature," page 1-33), you must define a role for the SSO user. You can configure SSO using one of the following protocols:

- ♦ SAML2
- OpenID Connect (OIDC)

You must create a role based on the chosen protocol.

- 1 Click **CREATE ROLE**.
- 2 Enter a role name.
- Modify the code for the SAML2 or OIDC protocol, as shown below.

SAML2 Role Example

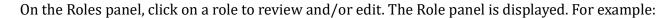
<RootUserAcctID> is your root user account ID. <IDP> is your provider ID.

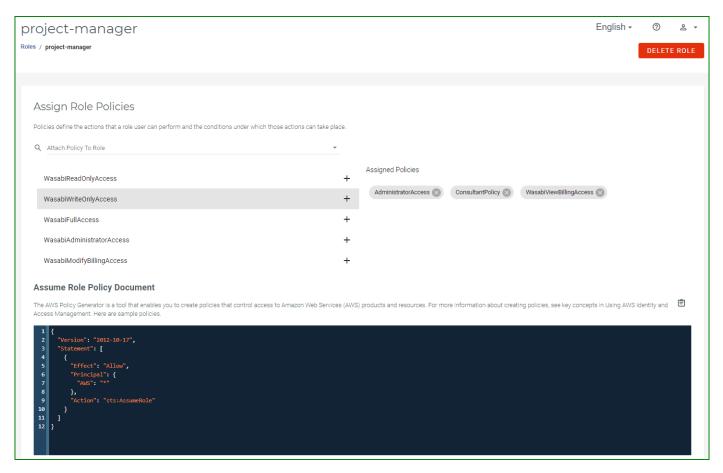
OIDC Role Example

<RootUserAcctID> is your root user account ID. <IDP> is your provider ID.

- 4 Click **SAVE** to create the new role.
- 5 Add a policy to the role as described in "Attaching a Policy to a Role," page 7-8.

Reviewing Details and Editing an Existing Role





This panel shows:

- ◆ Assign Role Policies
- Assume Role Policy Document.

You can click to copy the role policy to the Clipboard.

Attaching a Policy to a Role

The Role panel includes an area where a policy (or policies) may be attached to the role. For example:



If no policies are currently attached, the area appears as:

Assigned Policies No policies currently attached to Role.

In either case, you can attach a policy to the role. To do so:

- 1 Click in the "Attach Policy To Role" area.
- 2 Enter a text string for which to search. Policies with names that include text that matches the string are listed.
- 3 Select the policy from the list of those available.

Removing a Policy From a Role

To detach a policy from the role:

Click for the policy.

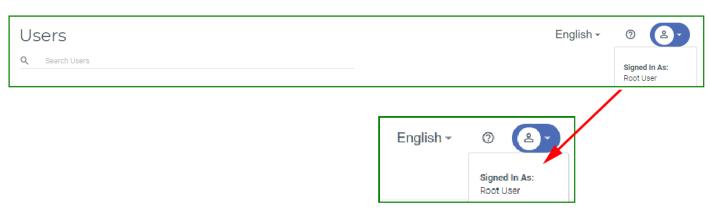
Deleting a Role

- 1 On the Roles panel, click on a role to delete.
- 2 Click **DELETE ROLE**.
- A messages asks you to confirm that you want to delete the role. Click **DELETE** to do so (otherwise, click **CANCEL**).

8 Users

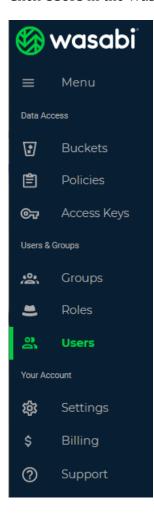
A *user* is an individual for whom you create Wasabi authentication, giving that person permission to perform actions in Wasabi. You can create a maximum of 4999 subusers per account.

When you first created a Wasabi account, you create a Root User. When you click on that you are signed in as Root User. But, the Root User should be reserved for specific account and service management tasks. It is not good practice for the Root User to perform routine tasks. Instead, create a new user for each person (as described in this chapter), even for those who require administrative access.

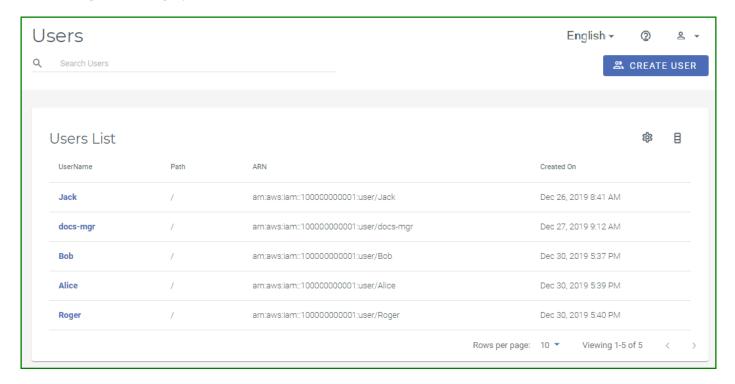


Reviewing the Users Panel

Click **Users** in the Wasabi menu on the left of the screen.



The Users panel is displayed.



The Users panel displays a list of users, each with this information:

- User name
- Path for the user
- Amazon Resource Name (ARN) for the user
- Date when the user was created

Tools at the top of the Users panel are provided for:

- "Searching for a User," page 8-4
- ♦ "Creating a User," page 8-4
- "Defining User Password Settings," page 8-14

In addition, you can review and edit details, as described in "Reviewing Details and Editing an Existing User," page 8-16.

After creating a user, you can follow the description of "Signing in as a New User," page 8-23.

Searching for a User

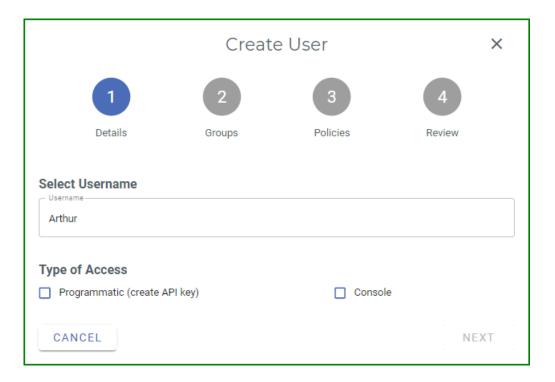
- Click in the "Search Users" area.
- **2** Enter a text string for which to search.
- 3 Press the **Enter** key. Users with names that include text that matches the string are displayed.

Note that the text string might appear anywhere in the name and letters for the text are not case-sensitive.

Creating a User

- 1 Click CREATE USER.
- Enter a name for the user. It can contain only alphanumeric characters and the following special characters: plus sign (+), equal sign (=), period (.), ampersand (@), dash (-), underscore (_).

In the example below, **Arthur** is entered as the user name.

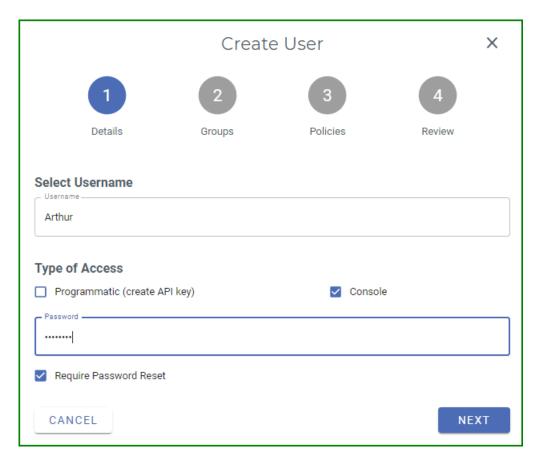


- **3** Specify user access:
 - Programmatic (the user can create an API key), and/or
 - Wasabi Management Console access

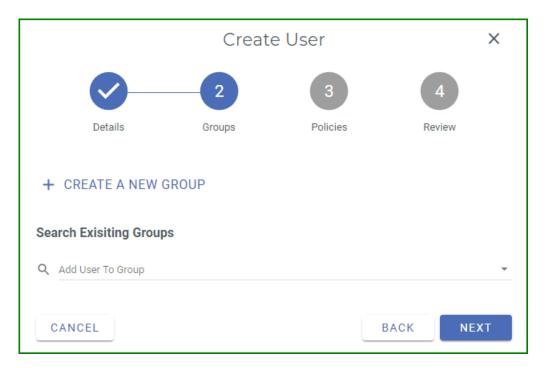
By enabling programmatic access, the user gets an access key and secret key at the end of the procedure to create a user. The access key and secret key are used to access the two resources (IAM and Storage, based on the policies assigned to the user) via means other than the Wasabi Console (such as AWS CLI, CloudBerry, Cyberduck, or any other S3 application).

When you select the Console option, you must enter a password with which the user must sign in to Wasabi. This password should follow the password policy settings.

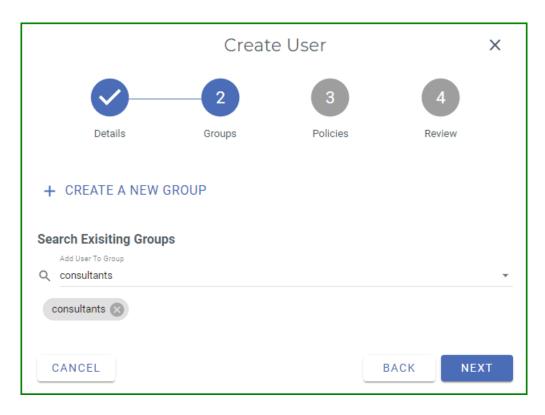
Optionally, you can select **Require Password Reset**, which indicates the user must reset this credential. In this case, the user will be prompted for a new password the first time he/she signs in to Wasabi.



- 5 Click **NEXT**.
- 6 It is best practice to assign the user to a group. You can do so in two ways:
 - ◆ Creating a new group by clicking CREATE A NEW GROUP (as described in "Creating a Group," page 6-4), or
 - Assigning the user to a group, as described in this step.



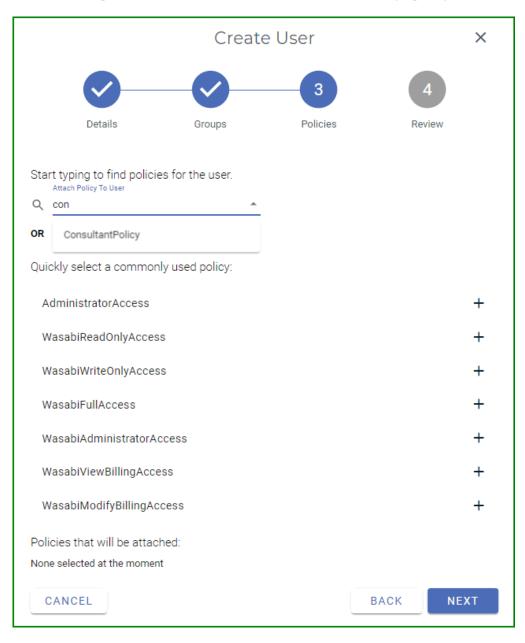
Click in the **Add User To Group** area and start typing to find the group in which to add the user. For this example, enter "**c**" and find the "consultants" group. The group is displayed in the **Add User To Group** area, as shown below. You could add the user to additional groups and they would appear in this area.



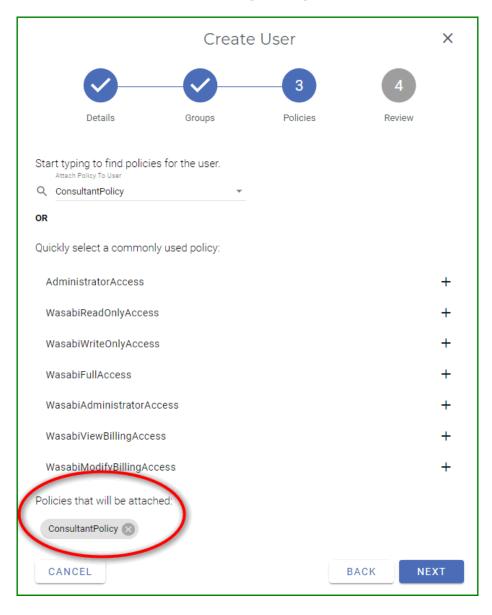
Click **NEXT**.

- Now you are ready to associate a policy with the user. You can do so in two ways:
 - ◆ Select one of the predefined policies listed in the middle of the panel. Simply click on + to the right of the policy name. (Refer to Chapter 3, *Policies*, for a description of each policy.)
 - Click in the **Attach Policy To User** area (at the top of the panel) and start typing to find the policy for the user, as described in this step.

For this example, enter "con" and find the "ConsultantPolicy" policy.

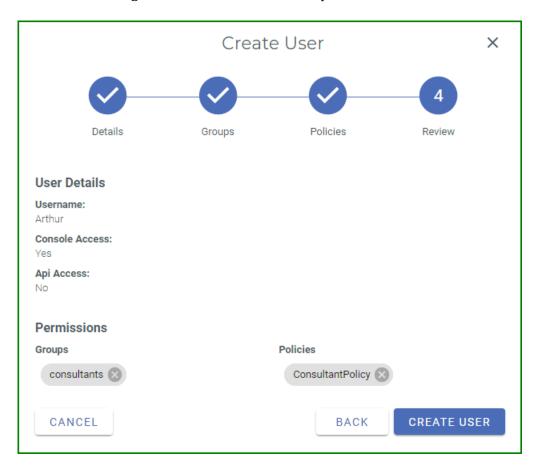


Click on **ConsultantPolicy** to add this policy for the user. Notice that the policy is displayed in the "Policies that will be attached" area, as shown below. You could add additional policies and they would appear in this area. You can add a maximum of 10 policies per user.

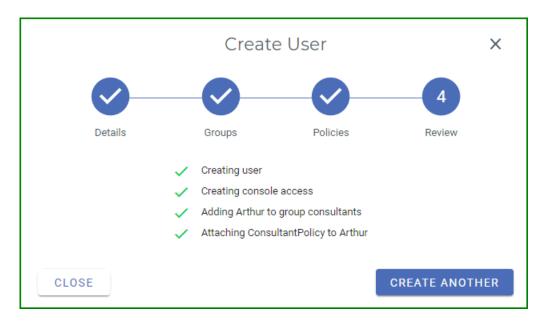


Click **NEXT**.

8 Review the settings for the new user. For example:

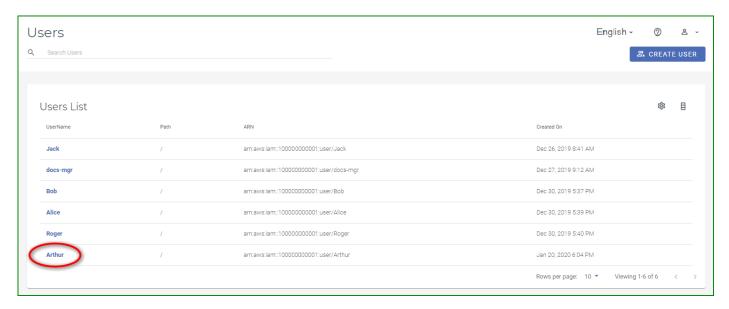


9 Click **CREATE USER** to continue. A checklist indicates that Arthur is successfully added as a new user.



You could create another user at this time. Or, close the Create User window by clicking X and return to the console.

When you return to the Users panel, the new user is displayed. For example:

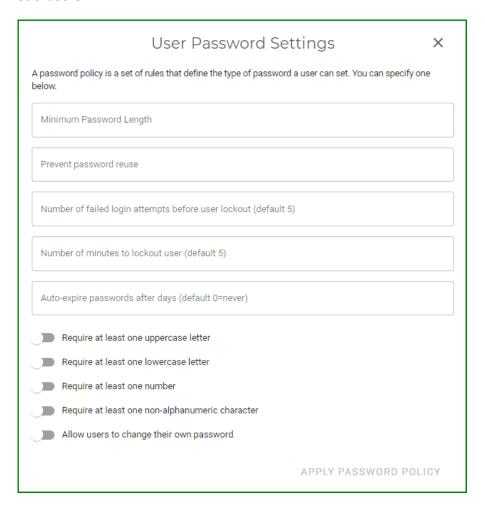


After creating a user, you might want to assign an access key to the user, as described in "Creating an Access Key for a User," page 8-19.

Defining User Password Settings

You can specify a password policy for users (root and all subusers). These are rules that define the type of password users can set.

1 Click on the Users page to open the User Password Settings panel. This setting will apply to Root and all sub-users.



The following is an overview of the settings you can apply for the user passwords.

Setting	Description
Minimum Password Length	Enter the minimum number of characters the user must enter for the password. This value must be between 6 and 128.
Prevent password reuse	Enter the number of times password can be reused.
Number of failed login attempts before user lock- out (default 5)	Enter the number of times a user can fail to enter the correct password before being locked out of the login.
Number of minutes to lockout user (default 5)	Enter the number of minutes that a user will be locked out after login attempt failures.
Auto-expire password after days (default 0=never)	Enter the number of days after which a password will expire.
Require at least one uppercase letter	Enable to require the user to enter a password that includes at least one uppercase letter.
Require at least one lowercase letter	Enable to require the user to enter a password that includes at least one lowercase letter.
Require at least one number	Enable to require the user to enter a password that includes at least one number.
Require at least one non-alphanumeric character	Enable to require the user to enter a password that includes at least one non-alphanumeric character.
Allow users to change their own password	Enable to allow the user to change the password. If this setting is not enabled, only the Root User can change the user password.

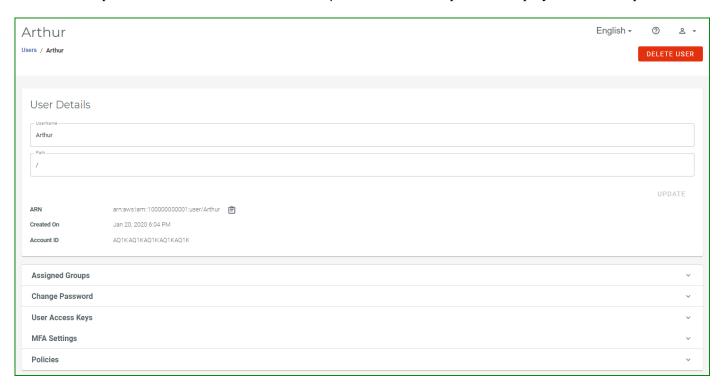
To enable a setting, slide the option to the right. When a setting is enabled, the slide option is blue: When a setting is disabled, the slide option is gray:



After changing password settings, click **APPLY PASSWORD POLICY**.

Reviewing Details and Editing an Existing User

On the Users panel, click on a user to review and/or edit. The User panel is displayed. For example:



This panel shows the user name and path. It also includes:

- ◆ ARN—Amazon Resource Name for the user
- ◆ Creation Date—Date/time when the user was created
- ◆ Account ID—Identification for the account in which the user is associated

You can click it to copy the ARN to the Clipboard.

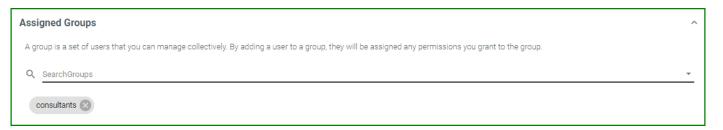
The panel also includes five types of information:

- ◆ "Assigned Groups," page 8-17
- ◆ "Change Password," page 8-18
- ♦ "User Access Keys," page 8-18
- "MFA Settings," page 8-21
- ♦ "Policies," page 8-22

Assigned Groups

Click **Assigned Groups** on the user panel.

The groups to which the user is associated are displayed. In this example, the user is associated with the "consultants" group:



To add the user to additional groups:

- 1 Click in the **SearchGroups** area.
- 2 Begin to type characters in a group name.
- When the group name is displayed, click on it to add it for the user.

To remove a group, click for the group.

Change Password

Click **Change Password** on the user panel.



To change the user's password:

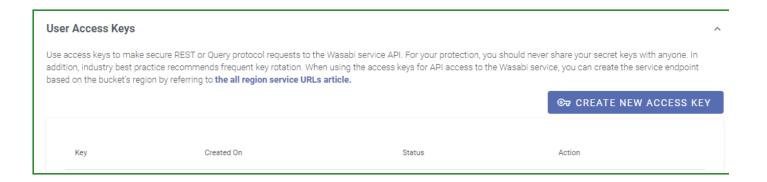
- 1 Click in the **Change Password** area.
- **2** Enter a new password that follows the password policy settings.
- 3 If you want to require the user to reset the password, check the **Require Password Reset** option.
- 4 Click **SAVE**.

You can also use this tool to disable the user's access to the console. To do so, click **DELETE ACCESS**. To reinstate access, you need to assign a password.

User Access Keys

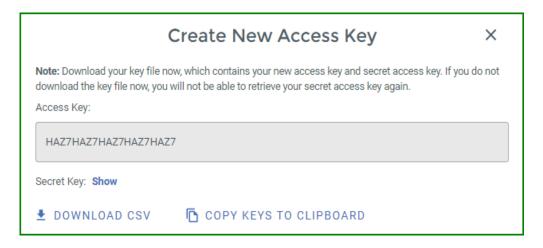
Click **User Access Keys** on the user panel.

You can create a new access key, change its status, or delete an existing access key.



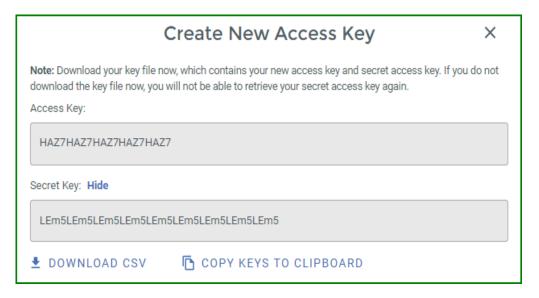
Creating an Access Key for a User

1 Click **CREATE NEW ACCESS KEY**. A unique access key for the user is displayed. For example:



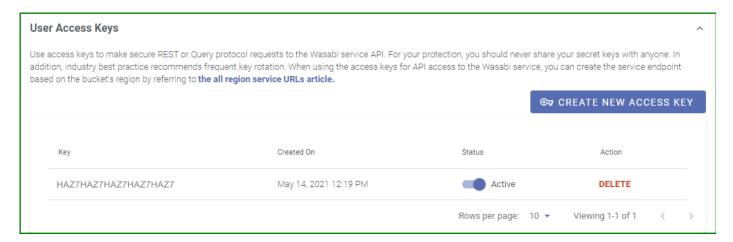
Be sure to copy this key and store it is a safe place. Notice that two buttons are provided to conveniently download the key as a CSV file or copy the key to the clipboard (and then paste it into a file to save).

To show the Secret Key, click the **Show** link. For example:



After saving the keys, click \mathbf{X} .

The access key is displayed. For example:



Changing the Status of an Access Key

You can change the status of an access key from Active to Inactive.

To make the access key active, slide the option to the right. The slide option is green: •• When the access key inactive, the option is gray: ••

Deleting an Access Key

- 1 Click **DELETE** to the right of the access key you want to delete.
- A confirmation message asks if you are sure you want to delete the access key. Click DELETE to remove the key (otherwise, click **CANCEL** to maintain the key).

MFA Settings

Click **MFA Settings** on the user panel.

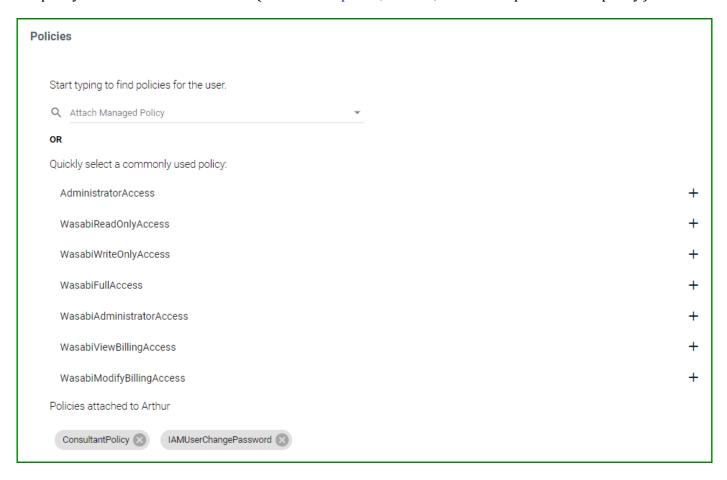
Refer to the description of "Creating a Virtual MFA Device," page 1-25.

Policies

Click **Policies** on the user panel.

You can associate policies with the user. You can do so in two ways:

- Click in the "Attach Managed Policy" area at the top of the panel. Start typing to find the policy for the user. When the policy name is displayed, click on it to associate it with the user. Attached policies are listed at the bottom of the panel under the heading, "Policies attached to [user]."
- ◆ Select one of the predefined policies listed in the middle of the panel. Simply click on + to the right of the policy name to add it to the user. (Refer to Chapter 3, *Policies*, for a description of each policy.)



To remove a policy from the user:

Click for the policy.

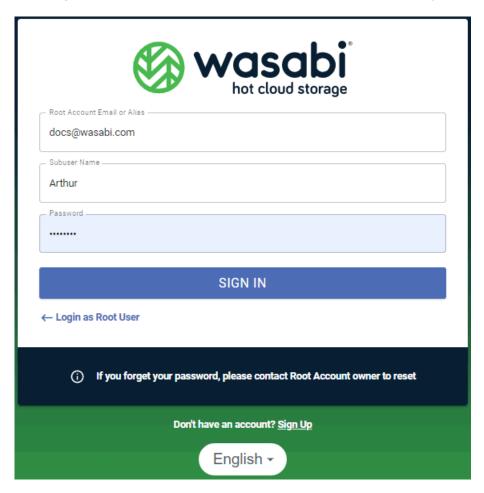
Signing in as a New User

After you create a new user, you can log out and log in as that user.

1 Open the account sign-in drop-down and click **Logout**. The Wasabi Sign In screen is displayed:



2 Click **Sign In As Subuser** at the bottom left of the screen. The Sign In screen changes to the following.

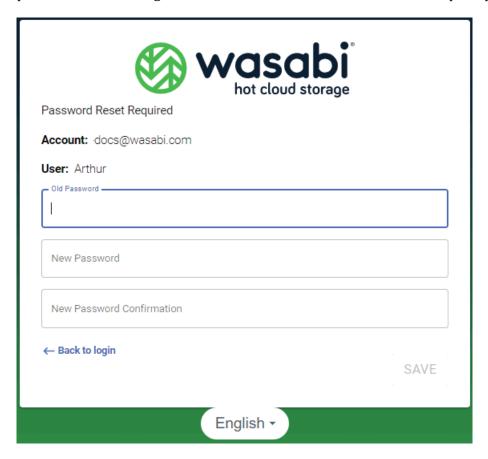


- 3 Enter the user account (for example, docs@wasabi.com) or alias name.
- 4 Enter the user name (Arthur) and password.

Note that **this is the password assigned to the user (Arthur)**. It is not the Wasabi account password (for docs@wasabi.com).

Click **SIGN IN**. If the subuser is not required to reset the password, the Wasabi Management Console is displayed and Arthur is ready to use Wasabi.

When the account was set up for Arthur in our example, we indicated that he would be required to reset the password when he signed in for the first time. In this case, Wasabi prompts for a new password:

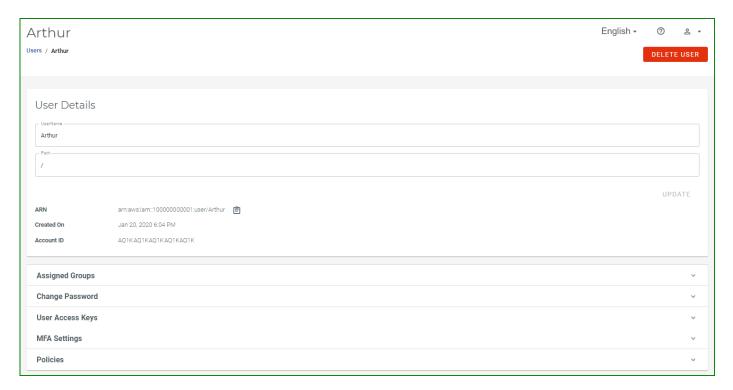


- **a** Enter the password assigned when the user was created. Then, enter and confirm a new password that follows the password policy settings. This is the credential that will be required for future sign-ins.
- **b** Click **SAVE**.

C Repeat Steps 3 through 5. After you click **SIGN IN**, the Object Storage panel is displayed and Arthur is ready to use Wasabi.

Deleting a User

1 On the Users panel, click on a user to delete. The User panel is displayed. For example:

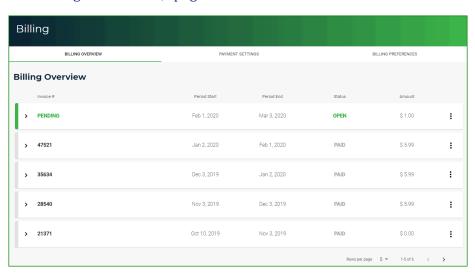


- 2 Click **DELETE USER**.
- A messages asks you to confirm that you want to delete the user. Click **DELETE** to do so (otherwise, click **CANCEL**).

9 Billing

The billing portal provides three tabs of information:

- "Billing Overview," page 9-2
- "Payment Settings," page 9-8
- "Billing Preferences," page 9-12



Accessing and Exiting the Billing Portal

Accessing the Billing Portal

There are two ways to access the billing portal:

- Click the Billing option on the Wasabi menu.
- Open the account sign-in drop-down and click Billing.

Returning to the Wasabi Management Console

When you are done working with the billing portal, return to the Wasabi Management Console. To do so:

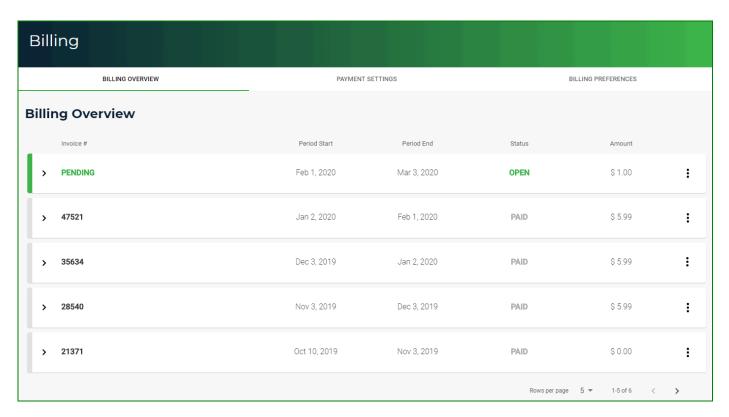
- 1 Open the account sign-in drop-down.
- 2 Click Back to Console.

Billing Overview

The Billing Overview lists all invoices with:

- ◆ Invoice number
- Period start and end dates
- Status of the invoice
- ◆ Amount of the invoice

In this example, one invoice is pending and four invoices have been paid:

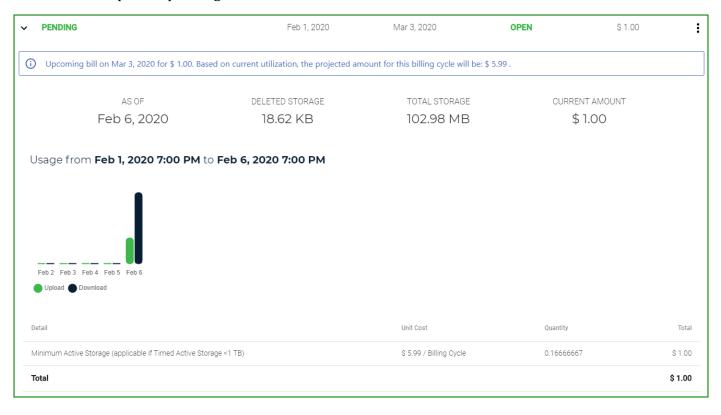


You can click on an invoice to display more details. (See the examples that follow this list).

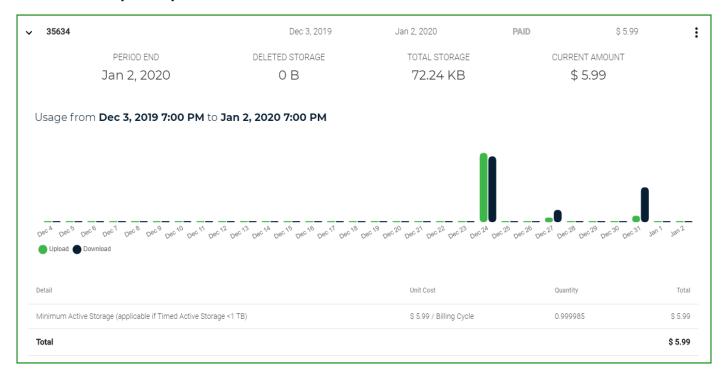
- Projected billing amount based on current utilization.
- Current usage as of the date specified. This includes the amount of deleted storage, total storage, and billing amount due.
- A utilization bar graph (calculated once daily) with total uploaded objects represented in green and downloaded objects in black. You can hover over the graph to see the total storage in bytes.
- Invoice details and total.

Note: A separate invoice will be created for one time charges and account prepayment as per a customer's request.

Here is an example of a pending invoice:



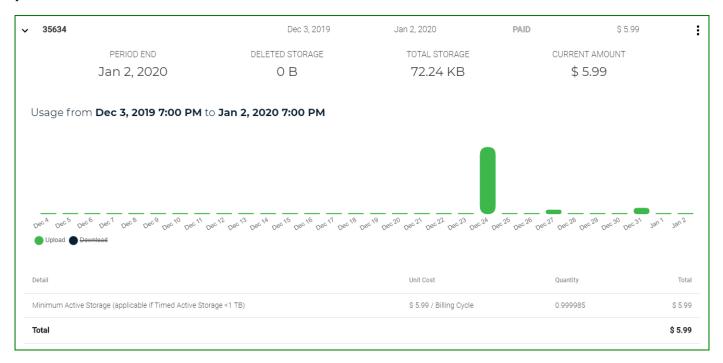
Here is an example of a paid invoice:



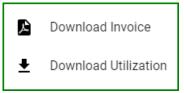
Notice **Upload** and **Download** at the bottom left of the utilization graph. These are toggles for the graph display. If you "turn off" **Upload**, the toggle has a line through it and only Download utilization is displayed. For example:



If you "turn off" **Download**, the toggle has a line through it and only Upload utilization is displayed. For example:

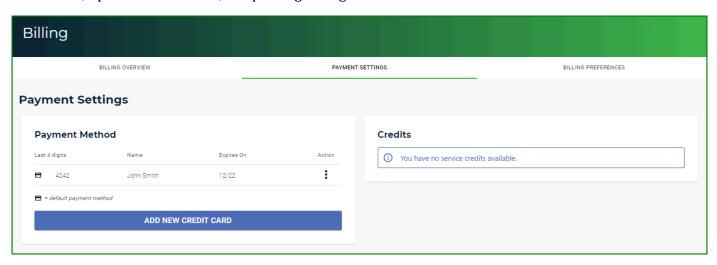


In addition, you can click to the right of an invoice to download the invoice of download a summary of bucket utilization in a CSV file.

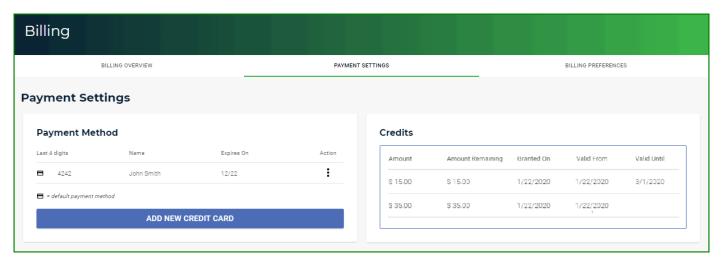


Payment Settings

You can enter a billing method for your account, make a credit card the default payment method, delete a credit card, update a credit card, or updating billing information.

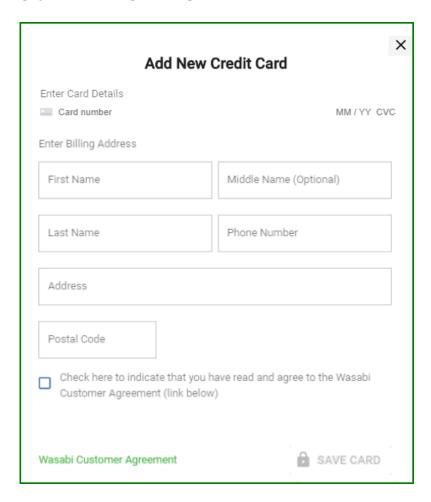


If you have service credits, they will appear on the right of this panel. For example:



Adding a New Credit Card

1 Click **ADD NEW CREDIT CARD**.



2 Both the Add and Edit credit card form supports auto-completion for the Street, City, State, and Country based on address selection.

- Be sure to check the box indicating you read and agree to the Wasabi Customer Agreement. To read the Agreement, click the green **Wasabi Customer Agreement** at the bottom of the panel.
- 4 Click **SAVE CARD**. You will receive a message indicating whether or not your card entry was successful.

Note: Street, City, State, and Country fields are not displayed if you fill in the address manually.

When you have successfully added a payment method, it is reflected in the Payment Method area.

Note: When adding a credit card for billing, if you attempt to enter an invalid number 5 times, the card registration feature is locked. A message will indicate that you have exceeded the number of allowed card registration attempts. Contact Wasabi Customer Support for assistance.

Making a Card the Default Payment Method

If you have multiple credit cards, you can specify the card that will be used by default to pay outstanding invoices.

- 1 Click the icon to the right of the credit card.
- **2** Click **Make Card Default**.

The symbol is displayed to the left of the credit card in the lsit.

Editing a Credit Card

You can change the information for a credit card.

- 1 Click the icon to the right of the credit card.
- 2 Click Edit Card.
- 3 The Edit Credit Card panel is displayed, where you can make changes.
- 4 Click SAVE CARD.

Deleting a Credit Card

You can remove a credit card from the list if the card is not the default for payments.

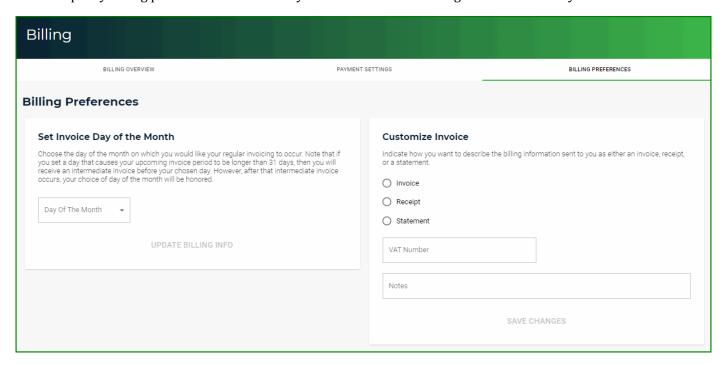
If the card is the default, change the default to another card and then follow the procedure below. If the card is the only credit card listed, add a new card, make it the default, and then follow the procedure below.

- 1 Click the icon to the right of the credit card.
- **2** Click **Delete Card**.

The card is automatically removed from the list.

Billing Preferences

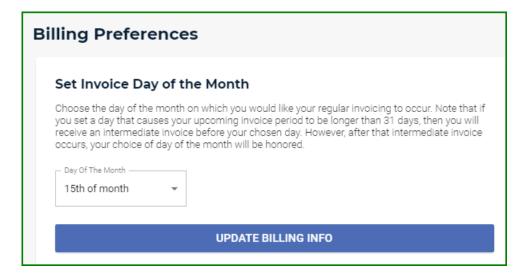
You can specify billing preferences to set the day of the month for invoicing and to customize your invoices.



Setting the Invoice Day of the Month

You can choose a day of the month on which you would like your regular invoicing to occur. You cannot choose a day that produces an invoice that is fewer than 5 days. If you set a day that causes your upcoming invoice period to be longer than 31 days, you will receive an intermediate invoice before your chosen day. However, after that intermediate invoice occurs, your choice of day of the month will be honored.

- 1 Click the **Day Of The Month** drop-down.
- 2 Select the day of the month (such as "15th of month" in the example below).



3 Click UPDATE BILLING INFO.

Customizing the Invoice

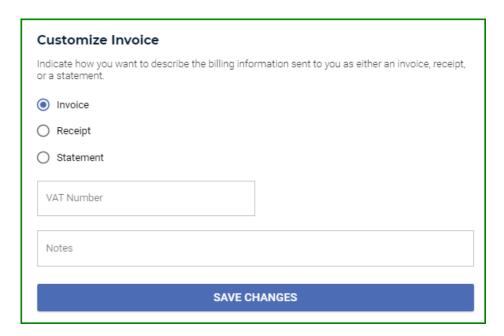
You can customize the invoice to indicate how you want to describe the billing information that is sent to you.

- 1 Indicate that you want to display the information as an invoice, receipt, or statement.
- Optionally, enter a VAT number (20 characters or less). Wasabi will validate that VAT number to prevent future charges for VAT. Once the VAT ID is entered and validated, Wasabi will no longer charge for VAT in the monthly invoice. Wasabi uses VAT validation services that are provided by EU member states. These ser-

vices can be unreliable and very sensitive to formatting of the VAT ID. If you are not be able to validate your VAT ID, try again in a few hours in case the EU member state services are off-line. Even if the validation of the VAT ID fails, you will still see what you entered into the field. It will not be considered as tax-exempt until Wasabi can complete the verification.

Note: Netherlands customers will still have to pay VAT tax.

- **3** Optionally, enter notes.
- 4 Click **SAVE CHANGES**.



About This Guide

The Wasabi Management Console User Guide provides details about Wasabi features with procedures for new and experienced users.

Content

Information in this guide is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless otherwise noted. No part of this guide may be reproduced or transmitted in any form by means electronic or mechanical, for any purpose, without express written permission of Wasabi Technologies.

Technical Support

The Wasabi web site has the latest product information. Use this resource to review product information, download software updates, contact technical support, access the Wasabi knowledge base, or provide feedback on Wasabi documentation and online help:

https://wasabi.com/help

Use this email address to contact a Wasabi Customer Support representative:

support@wasabi.com