## Object Storage Service (OBS 3.0) 25.9.0-HCS

## **Tool Guide (OBS Browser+)**

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## **Contents**

1 Introduction	
2 OBS Browser+ Function Overview	2
3 Downloading OBS Browser+	4
4 Installing OBS Browser+	5
5 Logging In to OBS Browser+	6
6 Basic Bucket Operations	8
6.1 Creating a Bucket	
6.2 Searching for a Bucket	
6.3 Viewing a Bucket's Basic Information	
6.4 Managing Fragments	12
6.5 Deleting a Bucket	13
7 Advanced Bucket Settings	14
7.1 Bucket ACLs	
7.1.1 Overview	
7.1.2 Configuring a Bucket ACL	16
7.2 Bucket Policies	17
7.2.1 Overview	17
7.2.2 Configuring a Bucket Policy	17
7.3 External Bucket Adding	20
7.3.1 Overview	20
7.3.2 Adding an External Bucket	22
8 Object Operations	24
8.1 Creating a Folder	24
8.2 Uploading a File or Folder	25
8.3 Searching for a File or Folder	26
8.4 Downloading a File or Folder	27
8.5 Copying a File or Folder	27
8.6 Moving a File or Folder	28
8.7 Deleting a File or Folder	28
8.8 Sharing a File or Folder	29

8.9 Restoring a File or Folder	29
9 Task Management	.31
9.1 Managing Running and Queued Tasks	
9.2 Managing Suspended Tasks	
9.3 Managing Completed Tasks	32
9.4 Managing Failed Tasks	33
10 Best Practices	. 35
10.1 Drag-and-Drop Upload	
10.2 Folder Sharing	
10.3 Background Running	35
10.4 Optimizing the Upload and Download Performance	36
11 FAQs	38
11.1 Where Can I Obtain Access Keys (AK and SK)?	38
11.2 Can I Install Two OBS Browser+ Tools from Different Sites in One System?	38
11.3 Why Does the Task Processing Speed Slow After the Number of Tasks Exceeds a Million?	38
11.4 Why Are the Displayed Number of Objects and Used Storage Capacity Different from the Actual Number of Objects and Storage Capacity?	39
11.5 How Can I Access a Specific Bucket or Directory?	
11.6 Can OBS Browser+ List Objects with Special Characters in Their Names?	
12 Uninstalling OBS Browser+	.40

## 1 Introduction

OBS Browser+ is a GUI-based desktop application that is intuitive and easy to use. It allows you to comprehensively manage OBS buckets and objects from your local end. For example, you can create buckets, and upload and download objects on OBS Browser+.

OBS Browser+ is applicable to Windows 10, macOS, and Windows Server 2016. **Table 1-1** lists the specifications required by each OS.

If there are millions of or more tasks in OBS Browser+, much more time is required for searching, which may result in task failures. To avoid this, you are advised to use obsutil.

**Table 1-1** PC specifications required by OBS Browser+

Item	Specification	Remarks
OS	<ul> <li>Windows 10 Pro 64-bit</li> <li>Windows Server 2016 standard 64-bit</li> <li>Mac OS X10.13.3</li> </ul>	Linux OSs are not supported. Windows 10 or later Windows OS releases are recommended.
СРИ	<ul><li>Minimum: 2-core 1.6 GHz</li><li>Standard: 2-core 2.4 GHz</li></ul>	Arm-based chips are not supported.
Memory	<ul> <li>Minimum: 4 GB</li> <li>Standard: 8 GB</li> <li>Available memory: ≥ 512 MB</li> </ul>	-
Required space for installation	≥ 512 MB	Hard drive space required for installing OBS Browser+
Available space of the data drive	≥ 3 GB	Hard drive space for storing data files of the OBS Browser+ database

# 2 OBS Browser+ Function Overview

Table 2-1 lists the functions supported by OBS Browser+.

**Table 2-1** OBS Browser+ supported functions

Function	Description
Basic operations on buckets	Creating buckets in a specified region, listing buckets, querying basic bucket information, configuring bucket ACLs, managing fragments in buckets, deleting buckets, and others
Basic operations on objects in buckets	Creating folders, uploading objects, listing objects, downloading objects, deleting objects, and more  Batch upload, download, deletion, copy, and move of objects  Upload by dragging
External bucket management	<ul> <li>Managing buckets shared by other accounts</li> <li>Adding an external bucket to OBS Browser+, or removing the added bucket</li> <li>Uploading objects to or downloading objects from external buckets</li> </ul>
System settings	Settings of OBS Browser+ parameters, which include:  • Maximum number of concurrent tasks: 1–50  • Part size in a multipart upload: 9–5120 MB  • Language change  • Proxy configuration

Function	Description
Task management	Listing statuses of all tasks, pausing, deleting, running, and searching for tasks
	Viewing real-time running statuses (progress, time) of tasks
	Pausing, deleting, or retrying a batch of tasks
	Searching for completed and failed tasks by types
	Automatic retry of failed tasks
Account management	Login using an AK and logout
	Keeping a maximum of 100 accounts login information by default
	Clearing and querying login history
Auxiliary functions	Favorites folder available for you to save frequently used paths (a maximum of 100 paths by default)
	Shortcut menus available for bucket and object lists, helping you quickly find the desired operation

# 3 Downloading OBS Browser+

To download OBS Browser+, perform the following steps:

- **Step 1** Log in to the operation plane console.
- **Step 2** Click the OBS Browser+ download link on the homepage of OBS Console.

----End

## 4 Installing OBS Browser+

#### **Procedure**

- **Step 1** Download OBS Browser+ by referring to **Downloading OBS Browser+**.
- **Step 2** Decompress the downloaded software package.
- **Step 3** Run the **obs-browser-plus Setup** *xxx.***exe** file to install OBS Browser+. *xxx* indicates the version number of OBS Browser+.
- **Step 4** Double-click **obs-browser-plus** on the **Start** menu or the desktop shortcut to run OBS Browser+.

----End

## 5 Logging In to OBS Browser+

You can log in to OBS Browser+ to access OBS and perform operations on buckets and objects. You can also log in to OBS Browser+ to access other object storage services compatible with OBS.

For details, see **Table 5-1**.

**Table 5-1** OBS Browser+ login methods

Service	Method	Scenario
OBS	Login with a	You have a permanent AK/SK pair.
Other object storage services compatible with OBS	Permanent AK/SK Pair	

#### **Prerequisites**

You have configured a proxy (if needed) by choosing More > Settings > Network on the login page.

#### **Using OBS Browser+ to Access OBS**

The following explains how to log in to OBS Browser+ to access OBS.

#### Login with a Permanent AK/SK Pair

In AK/SK login, you need to enter the AK and SK.

#### □ NOTE

 OBS Browser+ does not support login using a temporary AK/SK pair and a security token.

**Table 5-2** Login parameters

Parameter	Ma nda tor y (Ye s/N o)	Description
Account Name	Yes	It is user-defined and is a unique identifier that is different from the cloud service accounts you use to log in to OBS Browser+.  An account name contains 3 to 63 characters,
		and cannot contain the following special characters: \: * ? ' < >   ! @ # \$ % ^ ~
Server Address	Yes	Backend address of OBS 3.0. To obtain this address, search for the region domain name in the <pre><obsv3_global_domain_name_prefix>.<region0 _id="">.<external_global_domain_name> format on the "Basic_Parameters" sheet in the  xxx_export_all_v2_EN.xlsx file exported during installation.</external_global_domain_name></region0></obsv3_global_domain_name_prefix></pre>
Access Key ID & Secret Access Key	Yes	An access key ID (AK) defines a user that accesses the OBS system. An AK belongs to only one user, but one user can have multiple AKs. OBS identifies users through access key IDs.
		<ul> <li>A secret access key (SK) is the key used by users to access OBS. It is the authentication information generated based on the AK and the request header. An SK matches an AK, and they group into a pair.</li> </ul>
Access Path	No	Enter the path of a bucket or object. After login, you can only see the specified bucket or object.  Example: obs://bucket/folder

#### □ NOTE

OBS Browser+ can keep the login information of up to 100 accounts.

# 6 Basic Bucket Operations

This chapter describes how to manage buckets.

## 6.1 Creating a Bucket

Buckets are containers that store objects in OBS. To store data in OBS, you must first create a bucket.

- Step 1 Log in to OBS Browser+.
- **Step 2** In the upper part of the page, click **Create Bucket**.
- **Step 3** In the displayed dialog box, configure bucket parameters, as shown in **Figure 6-1**.

Figure 6-1 Creating a bucket

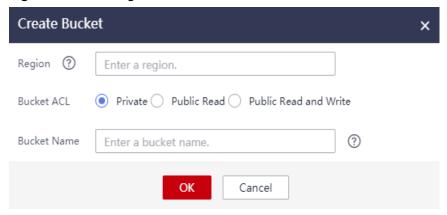


Table 6-1 Bucket creation parameters

Parameter	Description		
Region	Enter the ID of the region where you want to create a bucket.		
	Once the bucket is created, its region cannot be changed.		
	For lower latency and faster access, create a bucket in the region nearest to you.		
	To obtain the region ID, search for <b>region0_id</b> on the "Basic_Parameters" sheet in the xxx_ <b>export_all_v2_EN.xlsx</b> file exported during installation.		
Bucket ACL	Controls read and write permissions on buckets.  Private: Only users granted permissions by the ACL can access the bucket.		
	Public Read: Anyone can read objects in the bucket.		
	Public Read and Write: Anyone can read, write, or delete objects in the bucket.		

Parameter	Description	
Bucket Name	Name of the bucket you want to create, which must be globally unique.	
	A bucket name:	
	Must be 3 to 63 characters long and start with a digit or letter. Only lowercase letters, digits, hyphens (-), and periods (.) are allowed.	
	Cannot be formatted as an IP address.	
	• Cannot start or end with a hyphen (-) or period (.).	
	• Cannot contain two consecutive periods (), for example, mybucket.	
	• Cannot contain a period (.) and a hyphen (-) adjacent to each other, for example, <b>mybucket</b> or <b>mybucket</b> .	
	After a bucket is created, its name cannot be changed.	
	A user can create a maximum of 100 buckets in OBS.	
	NOTE	
	You can click next to the <b>Bucket Name</b> text box to view the bucket naming rules.	
	<ul> <li>When a URL is used to access a bucket, the bucket name will become part of the URL. According to the DNS rule, URLs do not support uppercase letters and cannot recognize buckets whose name contains uppercase letters. Therefore, a bucket name can contain only lowercase letters, digits, hyphens (-), and periods (.). For example, if you attempt to access bucket MyBucket using a URL, the URL will parse MyBucket as mybucket. This results in an access error.</li> </ul>	
	<ul> <li>DNS naming rules can standardize bucket names globally, facilitating the resolution during bucket access. With the DNS naming rules used, you can benefit from new functions and optimized features, and configure static website hosting for buckets.</li> </ul>	

**Step 4** Click **OK**. If the bucket is successfully created, it is displayed in the bucket list. If the creation fails, an error message will be displayed.

----End

## 6.2 Searching for a Bucket

Search for a bucket on OBS Browser+ by using a string contained in the bucket name.

- **Step 1** Log in to OBS Browser+.
- **Step 2** In the upper right corner of the page, enter a string contained in the bucket name in the search box, as shown in **Figure 6-2**.

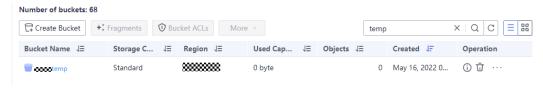
Figure 6-2 Search box



Step 3 Click .

Matching buckets are displayed in the list. If you want to search for other buckets, click  $\times$  in the search box to delete the keyword you have entered and enter a new one, as shown in **Figure 6-3**.

Figure 6-3 Searching for buckets



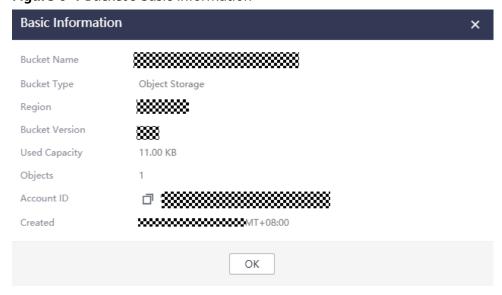
----End

## 6.3 Viewing a Bucket's Basic Information

View the basic information about a bucket, such as the bucket type, account ID, region, and used capacity.

- Step 1 Log in to OBS Browser+.
- **Step 2** Right-click the bucket you want to view and choose **Basic Information** from the shortcut menu.
- **Step 3** In the displayed **Basic Information** window, view your required information, as shown in **Figure 6-4**.

Figure 6-4 Bucket's basic information



Parameter	Description	
Bucket Name	Name of the bucket.	
Bucket Type	Object storage.	
Region	Region where the bucket is located.	
Bucket Version	Version number of the bucket.	
Used Capacity	Total capacity used by objects in the bucket.	
Objects	Number of objects in the bucket.	
Account ID	Unique identity of the bucket owner. It is the same as <b>Account ID</b> on the <b>My Credentials</b> page.	
Created	Time when the bucket was created.	

Table 6-2 Parameter description

----End

## **6.4 Managing Fragments**

#### Context

Data is uploaded to OBS using multipart upload. In the event of some situations, data uploads usually fail and generate fragments. You need to clear these fragments to free up storage space. The situations include but are not limited to the following:

- The network is in poor condition, and connection to the OBS server is frequently interrupted.
- The upload task is manually suspended.
- The device is faulty.
- The device is powered off suddenly.

With fragment management, you can clear fragments that are generated due to data upload failures.

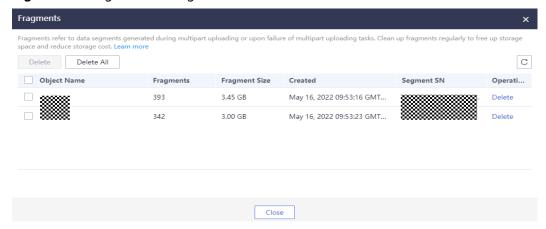
#### NOTICE

Deleted fragments cannot be recovered. Before deleting fragments, ensure that all multipart uploads are complete, or deleting fragments may cause uploads to fail.

- Step 1 Log in to OBS Browser+.
- **Step 2** Select the bucket you want and click **Fragments**.

- **Step 3** In the **Fragments** window, select the unwanted fragments and click **Delete** above the list. You can also click **Delete All** above the list to delete all fragments. Click
  - in the upper right corner to refresh the fragment list, as shown in Figure 6-5.

Figure 6-5 Fragment management



- **Step 4** In the displayed **Warning** dialog box, confirm the delete information and click **Yes**.
- Step 5 Click Yes.

The **Fragments** window is displayed. You can close this window to go back to the OBS Browser+ homepage.

----End

## 6.5 Deleting a Bucket

Delete the bucket created by yourself.

#### **Prerequisites**

- The bucket you want to delete is empty.
- You are the bucket owner.
- All objects in the bucket have been deleted and all multipart uploads in the bucket have been completed.

#### **Procedure**

- **Step 1** Log in to OBS Browser+.
- **Step 2** Select the bucket you want to delete and click **Delete**.
  - □ NOTE

The name of a deleted bucket can be reused for another bucket or a parallel file system at least 30 minutes after the deletion.

**Step 3** Click **Yes** to delete the bucket.

----End

## Advanced Bucket Settings

This chapter describes how to manage bucket attributes, including bucket ACL permissions, bucket policies, and external bucket adding.

#### 7.1 Bucket ACLs

Access to buckets can be controlled by access control lists (ACLs) or bucket policies. This section describes bucket ACLs and how to configure them.

#### 7.1.1 Overview

An ACL defines grantees and their granted permissions.

Bucket and object ACLs are associated with accounts. By default, an ACL is created when a bucket or object is created, authorizing the owner the full control over the bucket or object.

For easy and practical authorization, OBS ACLs have the following features:

- An ACL takes effect for both a tenant and users under this tenant.
- If a bucket and its objects have the same owner, the ACL configured on the bucket also applies to the objects in the bucket by default.
- An ACL is created during bucket or object creation by default. You can also configure one after the bucket or object is created.

ACLs control write and read permissions based on accounts, whose permission granularity is not as fine as **bucket policies** or IAM permissions. Generally, it is recommended that you use IAM permissions and bucket policies for access control.

You can grant bucket access permissions to users or user groups listed in **Table** 7-1 by configuring an ACL.

Table 7-1 Authorized users supported by OBS

Principal	Description
Specific users	ACLs can be used to grant accounts access permissions on buckets or objects. Once a specific account is granted the access permissions, all IAM users who have OBS resource permissions under this account can have the same access permissions to operate the bucket or object.  If you need to grant different access permissions to IAM users, configure bucket policies.
Owner	The owner of a bucket is the account that created the bucket. By default, a bucket owner has full control over the bucket ACL. The read and write permissions for the bucket ACL are permanently available to the bucket owner, and cannot be modified.
	An object owner is the account that uploads the object, but may not be the owner of the bucket that stores the object. The object owner has the read permission on the object, as well as the read and write permissions on the object ACL by default, and such permissions cannot be modified.
	NOTICE  Do not modify the bucket owner's read and write permissions for the bucket.
Anonymous users	Visitors who have not registered.
	NOTICE  If anonymous users are granted the permissions to access a bucket and objects, anyone can access the bucket or objects without identity authentication.

Table 7-2 lists the access permissions controlled by a bucket ACL.

Table 7-2 Access permissions controlled by a bucket ACL

Permission	Option	Description
Access to bucket	Read	Allows a grantee to obtain the list of objects in a bucket and the bucket metadata.
	Object read	Allows a grantee to obtain the object content and metadata.
	Write	Allows a grantee to upload, overwrite, and delete any object in a bucket.
Access to ACL	Read	Allows a grantee to obtain the bucket ACL.  The bucket owner has this permission permanently by default.

Permission	Option	Description
	Write	Allows a grantee to update the bucket ACL.  The bucket owner has this permission permanently by default.

**Table 7-3** lists the access permissions controlled by an object ACL.

Table 7-3 Access permissions controlled by an object ACL

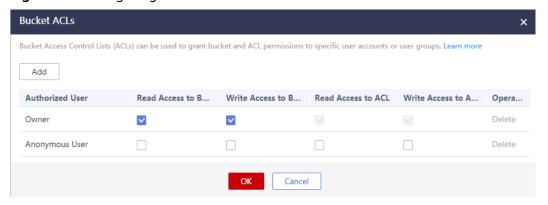
Permission	Option	Description
Access to object	Read	Allows a grantee to obtain the content and metadata of an object.
Access to ACL	Read	Allows a grantee to obtain the object ACL.  The object owner has this permission permanently by default.
	Write	Allows a grantee to update the object ACL.  The object owner has this permission permanently by default.

## 7.1.2 Configuring a Bucket ACL

Configure ACL permissions for owners, anonymous users, or specific users.

- Step 1 Log in to OBS Browser+.
- **Step 2** Select the bucket you want and click **Bucket ACLs**.
- **Step 3** Configure the bucket ACL as needed and click **OK**, as shown in **Figure 7-1**.

Figure 7-1 Configuring an ACL



If no ACL permissions are configured for a new bucket, OBS Browser+ automatically disables the access to the bucket and its objects by any other users except the bucket owner.

----End

### 7.2 Bucket Policies

Access to buckets can be controlled by access control lists (ACLs) or bucket policies. This section describes bucket policies and how to configure them.

#### 7.2.1 Overview

A bucket owner can configure a bucket policy to manage access to the bucket.

Bucket policies centrally control access to buckets and objects based on a variety of request elements, such as actions, principals, resources, and others (like IP addresses). If the resource is set to \*, the permission applies to all objects in a bucket. For example, an account can create a policy to:

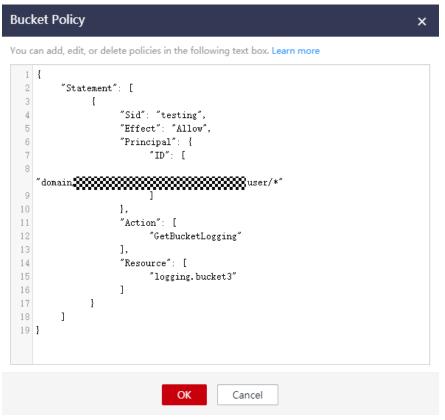
- Grant users the write permission for a specific bucket.
- Grant users in a specific network the write permission.

### 7.2.2 Configuring a Bucket Policy

Bucket policies define the access control over resources (buckets and objects) in OBS.

- **Step 1** Log in to OBS Browser+.
- **Step 2** Select the bucket you want and choose **More** > **Bucket Policy**. The window shown in **Figure 7-2** is displayed.





**Step 3** Enter a bucket policy in the following format.

 Grant permissions to an account. In the following example, the account (whose account ID is 783fc6652cf246c096ea836694f71855) is granted the permission required to obtain the log management information about bucket logging.bucket3.

**Table 7-4** describes the parameters that you need to manually modify in the example above:

**Table 7-4** Parameter changes

Item to Modify	Description
GetBucketLogging	Value of the <b>Action</b> field that indicates all OBS-supported actions in the policy. The value is a case-insensitive string. The value can contain a wildcard character (*), for example, " <b>Action</b> ":["List*", "Get*"], to apply all actions to the resources. You need to change the value as needed.
Allow	Value of the <b>Effect</b> field that indicates whether the permission in the policy is allowed or denied. The value must be <b>Allow</b> or <b>Deny</b> .
logging.bucket3	The bucket on which the policy works. You can change the bucket name as needed.
783fc6652cf246c096ea83 6694f71855	ID of an account. You can change it as needed. You can obtain the account ID on the bucket's <b>Basic Information</b> page.

Grant permissions to an IAM user. In the following example, the user (whose ID is 71f3901173514e6988115ea2c26d1999) under the account (whose ID is 219d520ceac84c5a98b237431a2cf4c2) is assigned the permission required to set log management for bucket logging.bucket3.

```
"Statement": [
     {
        "Sid": "testing",
        "Effect": "Allow",
        "Principal": {
          "ID": [
             "domain/219d520ceac84c5a98b237431a2cf4c2:user/
71f3901173514e6988115ea2c26d1999'
          ]
        "Action": [
          "PutBucketLogging"
        "Resource": [
          "logging.bucket3"
     }
  ]
}
```

**Table 7-5** describes the parameters that you need to manually modify in the example above:

**Item to Modify** Description PutBucketLogging Value of the **Action** field that indicates all OBS-supported actions in the policy. The value is a case-insensitive string. The value can contain a wildcard character (\*), for example, "Action":["List\*", "Get\*"], to apply all actions to the resources. You need to change the value as needed. Allow Value of the **Effect** field that indicates whether the permission in the policy is allowed or denied. The value must be **Allow** or **Deny**. logging.bucket3 The bucket on which the policy works. You can change the bucket name as needed. ID of an account. You can change it as 219d520ceac84c5a98b237 431a2cf4c2 needed. You can click on next to the target bucket to obtain the Account ID on the Basic **Information** page. 71f3901173514e6988115e ID of a user under the account. You can a2c26d1999 change it as needed. You can choose **My Credentials** from the

**Table 7-5** Parameter changes

For details about bucket policy parameters, see section "Bucket Policy Parameters" in the *Object Storage Service User Guide*.

username in the upper right corner of OBS

Console to obtain the IAM User ID.

----End

## 7.3 External Bucket Adding

After external buckets are added through OBS Browser+, you can access them locally. This section describes external buckets and how to configure them.

#### 7.3.1 Overview

If you have ACL permissions on buckets of other users, you can add them through OBS Browser+ as external buckets. By doing so, you can access these external buckets locally using your account.

By default, after user A has added a bucket of user B and uploaded an object to the bucket, user B cannot download the object.

You can grant read and write permissions to a bucket through the bucket ACL or bucket policy. Permissions controlled by a bucket ACL are as follows:

Table 7-6 Permissions controlled by a bucket ACL

Bucket ACL Permission	Option	Mapped Action in a Custom Bucket Policy
Access to bucket	Read	<ul><li>HeadBucket</li><li>ListBucket</li><li>ListBucketVersions</li><li>ListBucketMultipartUploads</li></ul>
	Write	<ul><li>PutObject</li><li>DeleteObject</li><li>DeleteObjectVersion</li></ul>
Access to ACL	Read	GetBucketAcl
	Write	PutBucketAcl

Permissions controlled by a standard bucket policy are as follows:

**Table 7-7** Permissions controlled by a standard bucket policy

Parameter	Public Read	Public Read and Write
Effect	Select <b>Allow</b> .	Select <b>Allow</b> .
Principal	* (Any user)	* (Any user)
Resources	* (All objects in a bucket)	* (All objects in a bucket)
Actions	<ul><li>GetObject</li><li>GetObjectVersion</li><li>HeadBucket</li><li>ListBucket</li></ul>	<ul> <li>GetObject</li> <li>GetObjectVersion</li> <li>PutObject</li> <li>DeleteObject</li> <li>DeleteObjectVersion</li> <li>HeadBucket</li> <li>ListBucket</li> </ul>
Conditions	N/A	N/A

If a custom bucket policy is used to authorize such permissions, the HeadBucket, ListBucket, GetObject, and GetObjectVersion actions must be allowed. More actions can be allowed according to your actual needs.

The following are some restrictions when you (the user who adds the bucket) operate the external bucket:

- You cannot restore Archive objects that are not yours in the external bucket. You can view the object restore status only when the owner of those Archive objects grants you the read permission for the objects.
- You can perform only authorized actions on existing objects in the external bucket. If you want to perform additional operations on an object, you need to get corresponding permissions granted by the object owner.
- If you upload an object to the external bucket, the object ACL permissions will be automatically granted to the bucket owner, including the read permission for the object and the read and write permissions for the object ACL.
- The encrypted objects you uploaded to the external bucket cannot be accessed by the bucket owner, because the bucket owner does not have the key.
- To download an object from the external bucket, you must have the read permission for the object. You cannot download encrypted objects from the external bucket.

### 7.3.2 Adding an External Bucket

Add buckets of other users through OBS Browser+.

#### **Prerequisites**

You have been granted the ACL permissions to access buckets of other users.

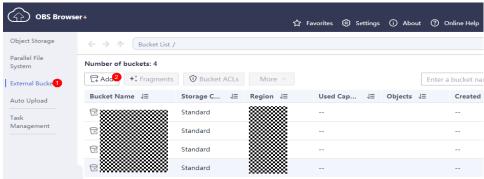
For example, account A needs to add bucket **bucket\_share** of account B to itself for it to read objects stored in bucket **bucket\_share**. To do this, account B must obtain the **Account ID** of account A and grant account A the read permission on bucket **bucket\_share** through OBS Console.

Account A can obtain its account ID (same as the owner ID) from the **Basic Information** page of the bucket.

If account B has granted anonymous users the read permission on bucket **bucket\_share**, all users registered with OBS can add bucket **bucket\_share**. For details about how to grant permissions to anonymous users, see **Configuring a Bucket ACL**.

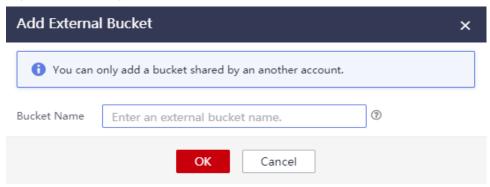
- Step 1 Log in to OBS Browser+.
- Step 2 In the navigation pane, choose External Bucket, as shown in Figure 7-3.

Figure 7-3 External buckets



**Step 3** Click **Add**. In the **Add External Bucket** dialog box, enter the external bucket name and click **OK**, as shown in **Figure 7-4**.

Figure 7-4 Adding an external bucket



An external bucket name must be globally unique and:

- Must be 3 to 63 characters long and start with a digit or letter. Only lowercase letters, digits, hyphens (-), and periods (.) are allowed.
- Cannot be formatted as an IP address.
- Cannot start or end with a hyphen (-) or period (.).
- Cannot contain two consecutive periods (..), for example, **my..bucket**.
- Cannot contain a period (.) and a hyphen (-) adjacent to each other, for example, **my-.bucket** or **my.-bucket**.

After external buckets are added, you can see them in the bucket list and have ACL access permissions for them.

----End

#### Example

If you grant anonymous users the read and write permissions on bucket **test**, anonymous users can log in to OBS Browser+ and add bucket **test** using their own accounts, so they can access the bucket locally. On the external bucket page of OBS Browser+, anonymous users can see bucket **test** in the list and have the write permission for the bucket. They can upload, overwrite, and delete any object in bucket **test**.

## 8 Object Operations

Objects are basic data units that you operate in OBS. This chapter describes how to manage objects.

Right-click in the blank area of the object list and choose **Create Folder** or **Upload** from the shortcut menu to manage objects.

## 8.1 Creating a Folder

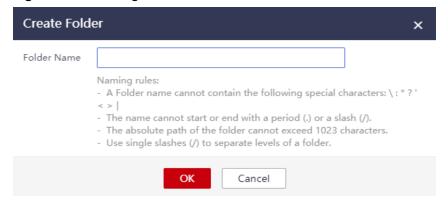
Create a folder on OBS Browser+.

#### **Context**

Unlike a file system, OBS does not involve the concepts of file and folder. For easy data management, OBS allows you to simulate a folder by adding a slash (/) to the name of an object.

- Step 1 Log in to OBS Browser+.
- Step 2 Click the bucket where you want to create a folder and click Create Folder.
- **Step 3** In the displayed dialog box, enter a folder name and click **OK**, as shown in **Figure** 8-1.

Figure 8-1 Creating a folder



- A folder name cannot contain the following special characters: \: \*?' <> |
- A folder name cannot start or end with a period (.) or slash (/).
- A folder name cannot exceed 1,023 bytes. The length of a folder name is the sum of the length of its own name and the length of its upper-level directory names. The total length cannot exceed 1,023 bytes. Directories of different levels are automatically separated by slashes (/). For example, if the upperlevel directory of folder01 is folder02, the name length of folder folder01 is the length of folder02/folder01/.
- A single slash (/) separates and creates multiple levels of folders.

Step 4 Click OK.

----End

## 8.2 Uploading a File or Folder

Upload local files or folders to OBS. If you do not specify a storage class during file or folder upload, any file or folder you upload will inherit the storage class of the bucket by default.

#### Context

Files are uploaded using multipart upload on OBS Browser+. With multipart upload, you can upload a single file with the maximum size of 48.8 TB.

A file or folder name cannot exceed 1,023 bytes. The length of a file name is the sum of the length of its own name and the length of its upper-level directory names. The total length cannot exceed 1,023 bytes. Directories of different levels are automatically separated by slashes (/). For example, if the upper-level folder of file file01 is folder01, the name length of file file01 is the length of folder01/file01.

- Step 1 Log in to OBS Browser+.
- **Step 2** Click the bucket where you want to upload files or folders.
- Step 3 Click Upload and then Add File or Folder, as shown in Figure 8-2.

Upload Object Object Permission Private Public Read Public Read and Write Upload Object Add File Remove All 0/500 Objects (files or folders) Object Name Local Path Size Operation No data available. OK Cancel

Figure 8-2 Uploading a file or folder

For better experience when using the **Add File** function, you are advised to upload a maximum of 100 files at a time. If you need to upload more, place all the files in a folder and upload them by adding a folder.



You must have access to the file you want to upload, or the file upload will fail.

**Step 4** In the displayed dialog box, select the file or folder you want to upload and click **Open**.

You can upload one folder or multiple files at a time. To upload multiple files, hold down **Ctrl** or **Shift** to select multiple files and batch upload them. You can also press **Ctrl+A** to select all files. The operations are consistent with those in Windows operating systems.

Step 5 Click OK.

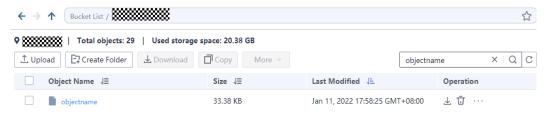
----End

## 8.3 Searching for a File or Folder

Search for a file or folder by name prefix on OBS Browser+.

- **Step 1** Log in to OBS Browser+.
- **Step 2** Click the bucket that stores the target file or folder.
- **Step 3** In the upper right corner of the page, enter the name prefix of the file or folder you want in the search box.
- **Step 4** Click  $\mathbb{Q}$ , as shown in **Figure 8-3**.

Figure 8-3 Searching for a file or folder



Matching files or folders are displayed in the list. If you want to search for other files or folders, click  $\times$  in the search box to delete the keyword you have entered and enter a new one.

For example, if you want to search for files or folders whose name prefix is **testobject** in bucket **mybucket**, go to the object management page of bucket **mybucket**, enter **testobject** in the search box in the upper right corner, and click Q. Files or folders with **testobject** as the name prefix are displayed in the list.

----End

## 8.4 Downloading a File or Folder

Download a file or folder from OBS to your local computer.

#### **Procedure**

- **Step 1** Log in to OBS Browser+.
- **Step 2** Go to the target bucket, select the file or folder you want to download, and click **Download**.

You can select multiple files or folders and batch download them.

**Step 3** In the displayed dialog box, select a path for saving the file or folder and click **Select Folder**.

----End

### 8.5 Copying a File or Folder

Copy a file or folder stored in OBS from one path to another path.

#### **Constraints**

- Files or folders in external buckets cannot be copied.
- The restore status of Archive objects cannot be copied.
- The source path and target path must be different.

#### **Procedure**

**Step 1** Log in to OBS Browser+.

- **Step 2** Go to the target bucket. Right-click the file or folder and choose **Copy** from the shortcut menu.
- **Step 3** Right-click the path for saving the file or folder and choose **Paste** from the shortcut menu.

----End

## 8.6 Moving a File or Folder

Move a file or folder stored in OBS from one path to another path.

#### **Procedure**

- Step 1 Log in to OBS Browser+.
- **Step 2** Go to the target bucket. Right-click the file or folder and choose **Move** from the shortcut menu.
- **Step 3** Right-click the path for saving the file or folder and choose **Paste** from the shortcut menu.

- Files or folders in external buckets cannot be moved.
- The source path and target path must be different.

----End

## 8.7 Deleting a File or Folder

Delete an existing file or folder as needed.

#### Context

Deleting a folder will also delete all files in it. Ensure that all files in a folder can be deleted before deleting the folder.

Deleting unwanted files or folders saves space.

#### **Procedure**

- Step 1 Log in to OBS Browser+.
- **Step 2** Go to the target bucket. Select the file or folder you want to delete and click **Delete**
- **Step 3** In the displayed dialog box, click **Yes**.

----End

#### **Important Notes**

In big data scenarios, parallel file systems usually have deep directory levels and each directory has a large number of files. In such case, deleting directories from parallel file systems may fail due to timeout.

To address this problem, you are advised to run the **hadoop fs - rmr obs://{**Name of a parallel file system**}/{**Directory name**}** command on the Hadoop client that has OBSA, an OBS client plugin, embedded.

### 8.8 Sharing a File or Folder

With the URL generated during object sharing, anonymous users can access the shared object.

#### **Prerequisites**

Anonymous users have been granted the permissions through OBS Console to read the specified object.

#### **Procedure**

- **Step 1** Log in to OBS Browser+.
- **Step 2** Locate the object you want to share and click next to the object.
- **Step 3** Click **Copy Link** to copy the object link to a browser and open it. Then you can access the object.

----End

### 8.9 Restoring a File or Folder

Restore Cold objects before downloading them.

#### Context

Cold storage is secure, durable, and inexpensive for storing data that is rarely accessed (averagely once a year). It is suitable for data archiving and long-term backup. This storage class allows you to safely store your data with low costs. However, it may take hours to restore data stored in this class.

If a Cold object is being restored, you cannot suspend or delete the restore task.

Objects in the **Restoring** state cannot be restored again.

- Step 1 Log in to OBS Browser+.
- **Step 2** Go to the object list in the target bucket.

**Step 3** Select the file or folder you want to restore and choose **More** > **Restore Object**.

To restore an object, you must configure the validity period and restore speed. **Table 8-1** describes relevant parameters.

Table 8-1 Restoring an object

Parameter	Description
Object Name	Name of the object or path to be restored.
Validity Period	Time duration when an object remains in the <b>Restored</b> state after it has been restored. The validity period starts when the object is restored. You can set the validity period to an integer ranging from 1 to 30 (days). The default value is <b>30</b> . For example, you set <b>Validity Period</b> to <b>20</b> when restoring an object. 20 days after the object is restored, its status will change from <b>Restored</b> to <b>Unrestored</b> .
Speed	<ul> <li>How fast an object will be restored.</li> <li>Expedited: Data smaller than 250 MB can be restored within 1 to 5 minutes.</li> <li>Standard: All Cold data can be restored within 3 to 5 hours.</li> </ul>

#### **Step 4** Click **OK** to confirm the restored file or folder.

To view the restoration status of the file or folder, click next to the object and choose **Object Properties** to view the restoration status. You can download the file only after it has been restored.

----End

#### Follow-Up Procedure

Within the validity period of a restored object, you can restore the object again. Each time the object is restored, its validity period will restart. This prolongs the validity period.

#### ■ NOTE

- 1. If a restored object is restored again, its expiration time should be later than the time set for the previous restoration. For example, if an object will expire at 4/12/2021 08:00:00 GMT+08:00 after it is restored for the first time, it should expire later than 4/12/2021 08:00:00 GMT+08:00 after the second restore.
- 2. You are advised not to restore a large number of files in one batch. When more than 10,000 objects are being restored, OBS Browser+ will take a long time to query the restoration progress of such objects. If you indeed need to restore such a large number of files in one batch, you are advised to use SDKs or APIs to query the restoration progress. Alternatively, you can download files after the maximum restoration time that is estimated based on the restoration rate you selected.

## 9 Task Management

## 9.1 Managing Running and Queued Tasks

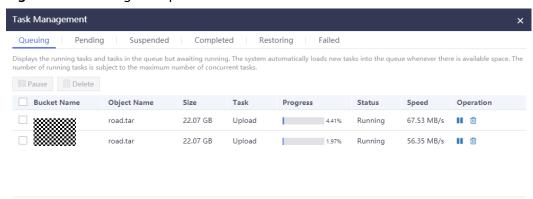
#### **Prerequisites**

There are running tasks in the list.

#### **Procedure**

- Step 1 Log in to OBS Browser+.
- **Step 2** In the navigation pane, choose **Task Management**.
- **Step 3** The **Queuing** tab is displayed by default, as shown in **Figure 9-1**.

Figure 9-1 Running and queued task list



- **Step 4** (Optional) Select one or more tasks and click **Pause** (■). Paused tasks will be displayed on the **Suspended** tab.
- **Step 5** (Optional) Select one or more tasks and click **Delete** ( in ).

----End

## 9.2 Managing Suspended Tasks

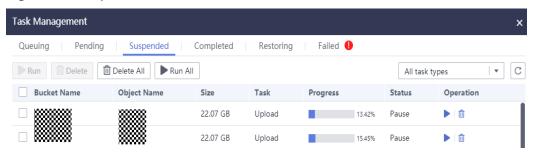
#### **Prerequisites**

There are suspended tasks in the list.

#### **Procedure**

- **Step 1** Log in to OBS Browser+.
- **Step 2** In the navigation pane, choose **Task Management**.
- Step 3 Choose the Suspended tab.

Figure 9-2 Suspended task list



- **Step 4** (Optional) Select one or more tasks and click **Run** ( ). Executed tasks will be displayed on the **Queuing** or **Pending** tab.
- Step 5 (Optional) Select one or more tasks and click **Delete** ( in ).

  ----End

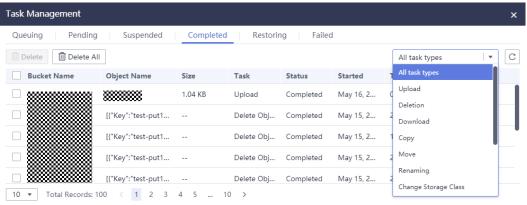
## 9.3 Managing Completed Tasks

#### **Prerequisites**

There are completed tasks in the list.

- **Step 1** Log in to OBS Browser+.
- **Step 2** In the navigation pane, choose **Task Management**.
- **Step 3** Choose the **Completed** tab.

Figure 9-3 Completed task list



**Step 4** (Optional) Select one or more tasks and click **Delete** ( in ).

----End



You are advised to periodically delete the completed tasks from the list. For details, see Why Does the Task Processing Speed Slow After the Number of Tasks Exceeds a Million?

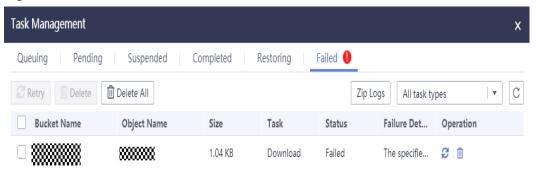
## 9.4 Managing Failed Tasks

#### **Prerequisites**

There are failed tasks in the list.

- Step 1 Log in to OBS Browser+.
- **Step 2** In the navigation pane, choose **Task Management**.
- Step 3 Choose the Failed tab.

Figure 9-4 Failed task list



- **Step 4** (Optional) Select one or more tasks and click **Delete** ( ).
- **Step 5** (Optional) Select one or more tasks and click **Retry** (€).

----End

### **A** CAUTION

• A failed task will be automatically retried three times.

# 10 Best Practices

## 10.1 Drag-and-Drop Upload

OBS Browser+ supports upload by drag and drop. You can drag one or more files or folders from a local path and drop them to the object list or file list. You can even drag files or folders directly to a specified folder. Drag-and-drop upload helps you easily upload local files to OBS.

## 10.2 Folder Sharing

OBS Browser+ offers folder sharing and login via authorization code so you can easily share a folder with other accounts within a specified validity period.

To share a folder, log in to OBS Browser+, right-click the folder you want to share and choose **Share**, or click **Share** in the **Operation** column.

Then, set the validity period of the shared URL, enter an access code, and create the URL.

Finally, you can send the generated sharing link to others. After obtaining the link information, they can use the authorization code to log in to OBS Browser+ and access the shared directory.

□ NOTE

The QR code is displayed only when you logged in to OBS Browser+ using an AK/SK pair.

### 10.3 Background Running

#### **Scenarios**

There are lots of tasks running on OBS Browser+, but you want to close it and perform other operations while the tasks continue in the background.

#### How do my tasks enter and end the background running mode?

To enter background running mode, click the close icon in the upper right corner of OBS Browser+ and select **Background Running** in the **Exit OBS Browser+** dialog box. Then, all your tasks will run in the background.

To end background running mode, double-click the OBS Browser+ icon in the task bar to display its interface again.

## 10.4 Optimizing the Upload and Download Performance

By default, OBS Browser+ uploads or downloads files or objects larger than 50 MB using multipart upload and download. To configure relevant parameters, choose **Settings** > **Basic Configurations**.

**Table 10-1** 

Parameter	Description
Max. Number of Concurrent Tasks	The maximum number of tasks that can run concurrently. The value ranges from 1 to 50 and the default value is <b>3</b> .
Max. Concurrent Parts	The maximum number of parts that can be concurrently uploaded or downloaded in a task. The value ranges from 1 to 50 and the default value is <b>3</b> .
Auto select part size	This option is selected by default, which automatically sets the size for each part based on the source file or object size.
Upload Part Size	Threshold for triggering multipart upload. If the size of the file to be uploaded is larger than the configured threshold, the file will be uploaded in multipart mode. The default value is 50 MB.  NOTE  To configure this parameter, you must deselect Auto select part size.  This parameter value ranges from 9 MB to 5 GB.
Download Part Size	Threshold for triggering multipart download. If the size of the file to be downloaded is larger than the configured threshold, the file will be downloaded in multipart mode. The default value is 50 MB.  NOTE  • To configure this parameter, you must deselect Auto select part size.  • This parameter value ranges from 9 MB to 5 GB.

In most cases, multipart tasks not only speed up transfer, but also support resumable transfer of failed tasks. By default, the part size of a multipart task can

be automatically adjusted by selecting **Auto select part size**. In practice, you can adjust the part size based on factors such as the file size and network conditions, to further improve upload and download performance and ensure the efficient and successful completion of tasks.

If you have a large number of **small files** (each is usually several MB) to be uploaded or downloaded, set **Max. Number of Concurrent Tasks** to a larger value for better performance. In this case, adjusting the concurrent parts allowed and the part size may be ineffective because the files are too small to reach the threshold of these parameters.

If you want to upload or download large files, set Upload Part Size, Download Part Size, and Max. Concurrent Parts to a larger value for better performance.

#### **CAUTION**

- Due to limiting resources, if there are too many concurrent tasks (calculated from Max. Number of Concurrent Tasks × Max. Concurrent Parts), the upload and download performance may deteriorate because of resource switchover and preemption between threads. To avoid this, adjust the corresponding parameter values based on the actual file size and network condition.
- If the client network is poor, you can reduce the size of parts to be uploaded or downloaded and the total number of concurrent tasks to avoid task failures caused by the network fluctuation.

## **11** FAQs

## 11.1 Where Can I Obtain Access Keys (AK and SK)?

When using OBS Browser+ to access OBS, you need to use the AK and SK for authentication. To obtain the AK and SK, perform the following steps:

- **Step 1** Log in to the operation plane console.
- **Step 2** Click the username in the upper right corner and choose **My Settings** from the drop-down list.
- Step 3 Click Manage Access Key.
- **Step 4** Click **Add Access Key**. In the displayed dialog box, click **OK**. The access key file (**credentials.csv**) is automatically downloaded to your local computer.

----End

## 11.2 Can I Install Two OBS Browser+ Tools from Different Sites in One System?

No.

- You can install only one OBS Browser+ tool in a system.
- OBS Browser+ tools available at different sites provide different functions.

Therefore, if you want to use OBS at a site, download the OBS Browser+ tool of the site.

## 11.3 Why Does the Task Processing Speed Slow After the Number of Tasks Exceeds a Million?

Cause

If the number of tasks in OBS Browser+ reaches a million or more, the system will spend more time in searching among massive amounts of tasks, which adds load to your device.

#### Solution

Clear historical tasks to improve performance.

To delete historical tasks, go to the **Task Management** page, select the completed tasks that you no longer need, and delete them, as shown in **Managing Completed Tasks**.

# 11.4 Why Are the Displayed Number of Objects and Used Storage Capacity Different from the Actual Number of Objects and Storage Capacity?

Possible causes are as follows:

- The statistics are not collected in real time and there is a delay.
- The statistics are estimates only.

The number of objects and used storage capacity displayed on OBS Browser+ are for reference only.

### 11.5 How Can I Access a Specific Bucket or Directory?

#### **Background:**

When you log in to OBS Browser+ using access keys (AK and SK) that only have the permissions to access a specific bucket or a specific directory in a bucket, a message indicating insufficient permissions is displayed.

#### Solution:

You can specify an access path (in the **obs://bucketName/folder** format) on the login page.

## 11.6 Can OBS Browser+ List Objects with Special Characters in Their Names?

No.

You are advised to use OBS SDKs to list objects with special characters in their names.

For details about how to use SDKs to list such objects, see section "Listing Objects" in the SDK documentation of OBS.

# 12 Uninstalling OBS Browser+

To uninstall OBS Browser+, perform the following steps:

- **Step 1** On the Windows **Start** menu, choose **Control Panel** > **Programs** > **Programs** and **Features**.
- **Step 2** Locate and right-click **obs-browser-plus** *xxx*.
- **Step 3** Choose **Uninstall** and uninstall the software as instructed.

----End