Object Storage Service

Tool Guide (OBS Browser+)

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Security Declaration

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process.* For details about this process, visit the following web page:
https://www.huawei.com/en/psirt/vul-response-process
For vulnerability information, enterprise customers can visit the following web page:
https://securitybulletin.huawei.com/enterprise/en/security-advisory

Contents

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, preview objects, 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. Click **here** to obtain the download addresses and installation methods of OBS Browser+ versions for different OSs.

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.

☐ NOTE

Before using this tool, add a valid payment method to avoid any restrictions caused by insufficient balance.

Table 1-1 PC specifications required by OBS Browser+

Item	Specification	Remarks
OS	● Windows 10 Pro 64-bit ● Windows Server 2016 standard 64-bit ● Mac OS X10.13.3	Linux OSs are not supported. Windows 10 or later Windows OS releases are recommended.
CPU	● Minimum: 2-core 1.6 GHz ● Standard: 2-core 2.4 GHz	Arm-based chips are not supported.
Memory	● Minimum: 4 GB ● Standard: 8 GB ● Available memory: ≥ 512 MB	-
Required space for installation	≥ 512 MB	Hard drive space required for installing OBS Browser+

Item	Specification	Remarks
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, modifying bucket storage classes, 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 ● Auto upload
Basic operations on parallel file systems (PFSs)	Listing PFSs, querying basic information of PFSs, configuring ACLs of PFSs, managing fragments in PFSs, deleting PFSs, and more
Basic operations on objects in PFSs	Creating folders, uploading objects, listing objects, downloading objects, deleting objects, and more ● Batch upload, download, deletion, copy, and move of objects ● Upload by dragging ● Multipart upload

Function	Description
External bucket management	Managing buckets shared by other accounts • Adding an external bucket to OBS Browser+, or removing the added bucket • Uploading objects to or downloading objects from external buckets
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
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, an account, and an authorization code and logout • Copying account information from an earlier OBS Browser version to the current OBS Browser+ version • 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 • Changing the theme color (dark blue or light blue) of OBS Browser+

3 Downloading OBS Browser+

Table 3-1 lists the links for downloading OBS Browser+ for different operating systems.

📖 **NOTE**

> Before using this tool, add a valid payment method to avoid any restrictions caused by insufficient balance.

Table 3-1 Links for downloading OBS Browser+

OS	Software Package	SHA-256 Checksum
Windows x32	**OBSBrowserPlus-win32**	431545786ef8f5b357c2c00e2f508ccae55375aa2984a5936d20152e32643abb
Windows x64	**OBSBrowserPlus-win64**	e6bf1c0c4cdb584208139f6892dde996ca969c73a92a3961ededd0cc9e9d0b2c
macOS	**OBSBrowserPlus-Mac**	358978304f1d9937a195faa9e940924b344eac8acbf7f1dc85f54b7672d387c0

📖 **NOTE**

> The latest version of OBS Browser+ will not be compatible with earlier Windows versions, such as Windows 7, Windows 8, and Windows 8.1. If you are using these Windows versions, download **OBSBrowserPlus_3.22.11-win64** or **OBSBrowserPlus_3.22.11-win32**, but OBS Browser+ 3.22.11 will not be maintained in the future.

4 Installing OBS Browser+

Procedure

Step 1 Click the download link of **OBS Browser+** to download the tool.

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 Huawei Cloud 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
Huawei Cloud OBS	**Login with a Permanent AK/SK Pair**	You have a permanent AK/SK pair.
	Login as a Huawei Cloud IAM User	You are an IAM user created by a Huawei Cloud account or HUAWEI ID.
	Login with an Authorization Code	You have the shared URL (or authorization code) and access code of an OBS folder that another person shares with you.
	Login with a Legacy Huawei Cloud Account	You have a legacy Huawei Cloud account. The creation of Huawei Cloud accounts is no longer supported. You can now sign up for a HUAWEI ID and enable Huawei Cloud services. To find out the differences between Huawei Cloud accounts and HUAWEI IDs, see the **account types of Huawei Cloud services**.
Other object storage services compatible with OBS	Login with a Permanent AK/SK Pair	You have a permanent AK/SK pair.
	Login as an IAM User	You are an IAM user created by an account of any other service provider.

Service	Method	Scenario
	Login with an Account of Any Other Service Provider	You have an account of any other service provider.

Prerequisites

- Programmatic access has been enabled for your account. For details, see **Viewing or Modifying IAM User Information**.
- You have configured a proxy (if needed) by choosing **More** > **Settings** > **Network** on the login page.

Using OBS Browser+ to Access Huawei Cloud OBS

The following explains how to log in to OBS Browser+ to access OBS in several ways.
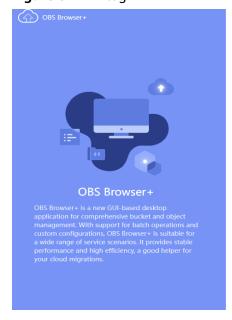
Login with a Permanent AK/SK Pair

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

📖 **NOTE**
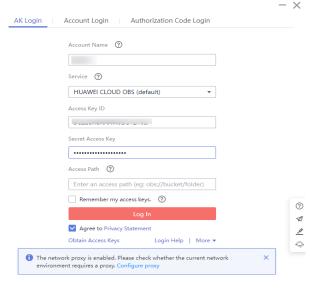
1. OBS Browser+ does not support login using a temporary AK/SK pair and a security token.
2. To log in to OBS Browser+ in the EU-Dublin region, you can obtain an access key pair by referring to **Where Can I Obtain Access Keys (AK and SK)?**

Figure 5-1 AK login

Table 5-2 Login parameters

Parameter	Mandatory (Yes/No)	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: \ : * ? ' < > | ! @ # $ % ^ ~
Service	Yes	**HUAWEI CLOUD OBS (default)** is selected. Selecting this option allows access to buckets in all regions where Huawei Cloud is available.
Access Key ID & Secret Access Key	Yes	You can create a permanent AK/SK pair on the **My Credentials** page by referring to **Creating an Access Key**. For more information, see **Access Keys (AK/SK)**.
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.

Login as a Huawei Cloud IAM User

If you log in as an IAM user, enter your account name, IAM username, and password, click **Log In**, enter the login authentication information, and then click **Continue**.

To create an IAM user, see **Creating an IAM User**.
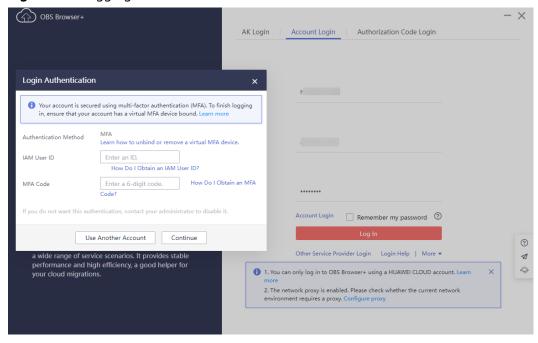
Figure 5-2 Logging in to OBS Browser+ as a Huawei Cloud IAM user

Table 5-3 Login parameters
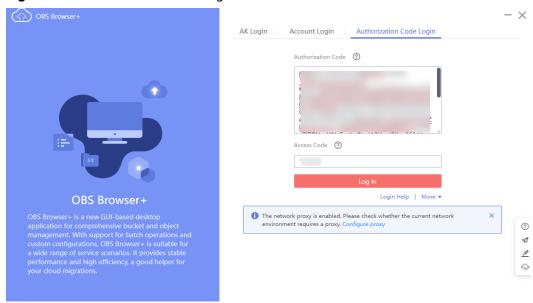
Parameter		Mandatory (Yes/No)	Description
Account name (cloud account)		Yes	Name of the Huawei Cloud account or HUAWEI ID you created. Mobile numbers or email addresses are not allowed. To obtain the account name, see **Obtaining Account Information**.
IAM user name		Yes	Name of the IAM user created by your Huawei Cloud account or HUAWEI ID. To view an IAM username, see **Obtaining IAM User Information**.
Password		Yes	Password of the IAM user
Login Authentication	Authentication Method	Mandatory when login authentication is enabled by your administrator	Currently, only virtual MFA-based login authentication is supported. To remove a virtual MFA device, see **How Do I Unbind or Remove a Virtual MFA Device?**

Parameter		Mandatory (Yes/No)	Description
	IAM User ID	Mandatory when login authentica tion is enabled by your administra tor	Enter an ID. To view an IAM user ID, see **How Do I Obtain an IAM User ID?**
	MFA Code	Mandatory when login authentica tion is enabled by your administra tor	Enter a 6-digit code. To obtain a virtual MFA verification code, see **How Do I Obtain a Virtual MFA Verification Code?**

Login with an Authorization Code

You can use the shared URL (or authorization code) and access code of an OBS folder that another person shares with you to log in to OBS Browser+ and access the shared folder.

Figure 5-3 Authorization code login

Table 5-4 Login parameters

Parameter	Mandatory (Yes/No)	Description
Authorization Code	Yes	Enter the shared URL or authorization code of an OBS folder that another person shares with you. ● Shared URL: Sharing a folder on OBS Console or OBS Browser+ generates a shared URL. 　– To obtain the shared URL on OBS Console, see **Sharing a Folder**. 　– To obtain the shared URL on OBS Browser+, see **Sharing a File or Folder**. ● Authorization code: Sharing a folder using obsutil generates an authorization code. 　– To obtain an authorization code using obsutil, see **Creating an Authorization Code for Directory Sharing**.
Access Code	Yes	A six-digit code specified when a folder is shared

 NOTE

● OBS Browser+ does not support the query or deletion of historically authorized login information.
● OBS Browser+ will automatically delete expired authorization codes.

Login with a Legacy Huawei Cloud Account

You can use your Huawei Cloud account and its password to log in to OBS Browser+, which relieves you from recording complex access keys.

Login with a HUAWEI ID is not allowed for OBS Browser+. To find out the differences between Huawei Cloud accounts and HUAWEI IDs, see the **account types of Huawei Cloud services**. You can also log in to the Huawei Cloud console to **check the account type you are using**.
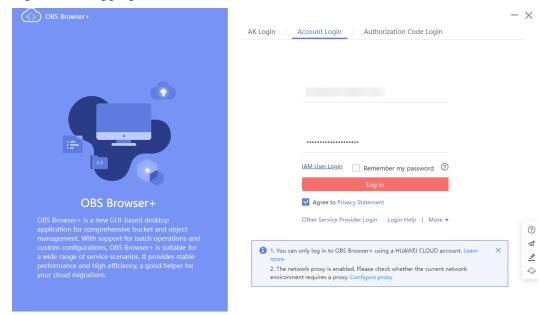
Figure 5-4 Logging in to OBS Browser+ with a Huawei Cloud account

Table 5-5 Login parameters

Parameter	Mandatory (Yes/No)	Description
Account name (cloud account)	Yes	Name of the Huawei Cloud account you created. Mobile numbers or email addresses are not allowed. To obtain the account name, see **Obtaining Account Information**.
Password	Yes	Password of your Huawei Cloud account

Using OBS Browser+ to Access Other Object Storage Services
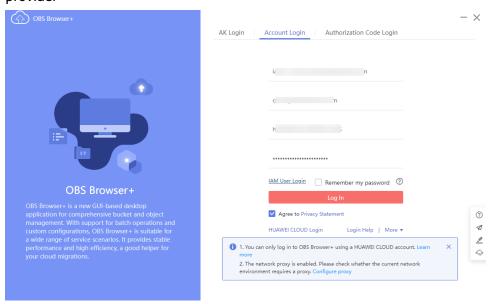
The only login difference between users of other service providers and Huawei Cloud users lies in the service provider selection.

- **Login with a permanent AK/SK pair:** In AK/SK login, you need to enter the AK and SK. For details, see **Login with a Permanent AK/SK Pair**.

- **Login as an IAM user:** You can use an IAM user created by an account of any other service provider to log in to OBS Browser+. For details, see **Login as a Huawei Cloud IAM User**. **Table 5-6** describes relevant parameters.

Figure 5-5 Logging in to OBS Browser+ as an IAM user of any other service provider

- **Login with an account of any other service provider:** You can use an account of any other service provider to log in to OBS Browser+. For details, see **Login with a Legacy Huawei Cloud Account**. **Table 5-6** describes relevant parameters.

Figure 5-6 Logging in to OBS Browser+ with an account of any other service provider

Table 5-6 Login parameters

Parameter	Mandatory (Yes/No)	Description
IAM address	Yes	IAM address of the service provider. You can enter either the global domain name or a regional domain name of IAM. Format of the global domain name: **iam.myhuaweicloud.com** Example: **iam.myhuaweicloud.com** Format of a regional domain name: **iam.*region*.myhuaweicloud.com** Example: **iam.ap-southeast-1.myhuaweicloud.com** For more information about valid OBS regions and endpoints, see **Regions and Endpoints**.
OBS address	Yes	Object storage service address of the service provider. You can enter either the global domain name or a regional domain name of the specified object storage service. If you specify the global domain name here, you can access all buckets in **these regions**. If you specify a regional domain name, you can access only buckets in the specified region. Format of the global domain name: **obs.myhuaweicloud.com** Example: **obs.myhuaweicloud.com** Format of a regional domain name: **obs.*region*.myhuaweicloud.com** Example: **obs.ap-southeast-1.myhuaweicloud.com**

6 Basic Bucket Operations
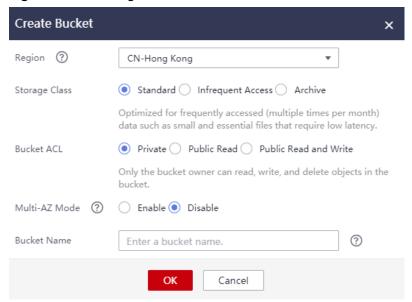
This chapter describes how to manage buckets.

6.1 Creating a Bucket

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

Procedure

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 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. ● Most OBS features are available in all regions, but some are only available for certain regions. If you want to use some features in your bucket, you are advised to create the bucket in a region where these features are available. For details, see **Function Overview**. ● If you want your bucket to be accessed from an ECS over the intranet, ensure that the bucket and the ECS are in the same region. For details, see **Accessing OBS from an ECS over the Intranet**.
Storage Class	Storage class of the bucket. Different storage classes meet customers' needs for storage performance and costs. ● **Standard**: applicable to scenarios where a large number of hot files or small files need to be accessed frequently (multiple times per month on average) and require fast access response. ● **Infrequent Access**: ideal for storing data that is not frequently accessed (less than 12 times per year on average) but requires fast access response. ● **Archive**: suitable for archiving data that is rarely accessed (averagely once a year) and has no requirements for quick response. NOTE During the object upload, an object inherits its bucket's storage class by default, and you can also specify a different storage class for the object. For more information, see **Storage Class**.
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.
Multi-AZ Mode	If multi-AZ storage is enabled, data in your bucket is stored in multiple AZs within a region. **After a bucket is created, its data redundancy policy cannot be changed.**

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, **my..bucket**. ● Cannot contain a period (.) and a hyphen (-) adjacent to each other, for example, **my-.bucket** or **my.-bucket**. **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 **Bucket Name** text box to view the bucket naming rules. ● 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. ● 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.

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.

Procedure

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**.
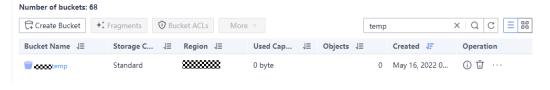
Figure 6-2 Search box

Step 3 Click .

Matching buckets are displayed in the list. If you want to search for other buckets, click ✕ 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.

Procedure

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
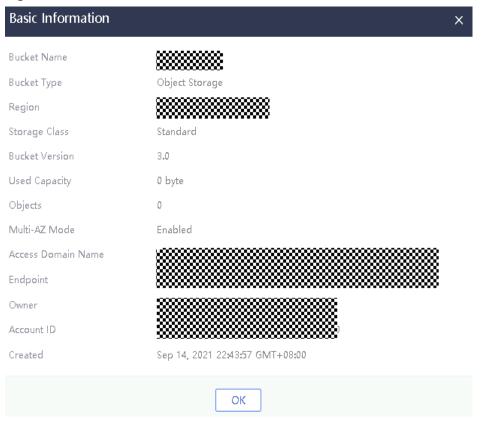
Table 6-2 Parameter description

Parameter	Description
Bucket Name	Name of the bucket.
Bucket Type	Object storage or a parallel file system.
Region	Region where the bucket is located.
Storage Class	Storage class of the bucket. It can be **Standard**, **Infrequent Access**, or **Archive**.
Bucket Version	Version number of the bucket.
Used Capacity	Total capacity used by objects in the bucket.
Objects	Number of objects in the bucket.
Multi-AZ Mode	Status of the multi-AZ function. If multi-AZ is enabled, data will be stored in multiple AZs.
Account ID	Unique identity of the bucket owner. It is the same as **Account ID** on the **My Credentials** page.
Created	Time when the bucket was created.

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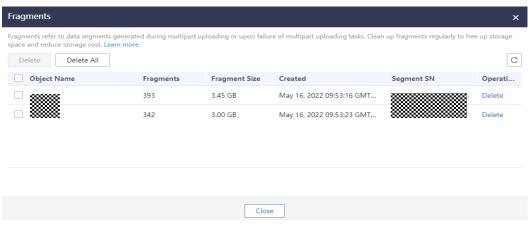
With fragment management, you can clear fragments that are generated due to data upload failures.

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

Procedure

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

7 Advanced Bucket Settings

This chapter describes how to manage bucket attributes, including bucket ACL permissions, lifecycle rules, 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 with Huawei Cloud. **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
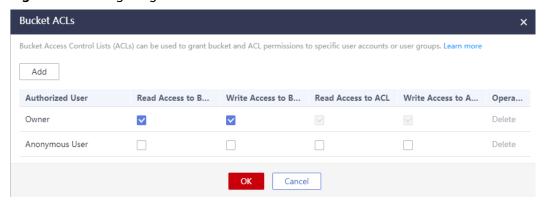
Permission	Option	Description
Access to object	Read	Allows a grantee to obtain the content and metadata of an object.
Access to ACL	Read	Allows a grantee to obtain the object ACL. The object owner has this permission permanently by default.
	Write	Allows a grantee to update the object ACL. The object owner has this permission permanently by default.

7.1.2 Configuring a Bucket ACL

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

Procedure

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
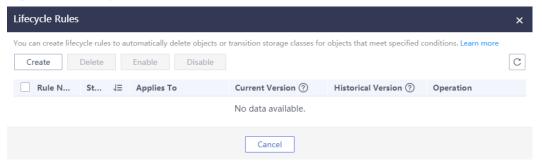
7.2 Configuring a Lifecycle Rule

Configure a lifecycle rule for a bucket to manage objects in the bucket.

For more information, see **Lifecycle Management**.

Procedure

Step 1 Log in to OBS Browser+.

Step 2 Select the bucket you want and choose **More** > **Lifecycle Rules**. The window shown in **Figure 7-2** is displayed.

Figure 7-2 Lifecycle rules

Step 3 Click **Create**. The window shown in **Figure 7-3** is displayed.
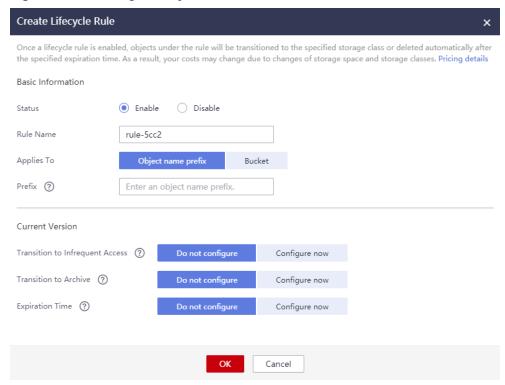
Figure 7-3 Creating a lifecycle rule

Step 4 Configure related parameters.

- **Status**: Select **Enable** to enable this lifecycle rule after the configuration.

- **Rule Name**: Enter a rule name that is no longer than 255 characters.

- **Applies To**: By selecting **Object name prefix**, the lifecycle rule will apply to objects with the specified prefix contained in their name. You can also select **Bucket** for the lifecycle rule to apply to all objects in the bucket.

  📖 **NOTE**

  - If **Object name prefix** is selected and the specified prefix and the prefix in an existing lifecycle rule overlap, OBS regards the two rules as one and forbids you to configure the current rule. For example, if there is a rule with prefix **abc** in the system, another rule whose prefix contains **abc** cannot be configured.

  - If there is already a lifecycle rule whose **Applies To** is set to **Object name prefix**, you are not allowed to configure a new rule whose **Applies To** is set to **Bucket**.

  - If there is already a lifecycle rule whose **Applies To** is set to **Bucket**, you are not allowed to configure a new rule whose **Applies To** is set to **Object name prefix**.

  - You can use a lifecycle rule to specify the number of days after which objects that have been last updated and meet specified conditions are automatically transitioned to the Infrequent Access or Archive storage class, or are automatically deleted upon expiration.

    – **Transition to Infrequent Access**: This rule transitions the objects meeting the conditions to the Infrequent Access storage class after the specified number of days since the last object update.

    – **Transition to Archive**: This rule transitions the objects meeting the conditions to the Archive storage class after the specified number of days since the last object update.

–   **Expiration Time**: This determines when an object will expire and then be deleted, or the day after which objects matching the rule will be deleted.

For example, on January 7, 2022, you saved the following files in OBS:

- log/test1.log
- log/test2.log
- doc/example.doc
- doc/good.txt

On January 10, 2022, you saved the following files in OBS:

- log/clientlog.log
- log/serverlog.log
- doc/work.doc
- doc/travel.txt

If you configure a rule on January 10, 2022 and the rule will make the objects with **log/** as their prefix expired and deleted one day later, objects **log/ test1.log**, **log/test2.log**, **log/clientlog.log**, and **log/serverlog.log** will be deleted from the files above on January 12, 2022.

On the day of operation, you can set the objects with the name prefix **log** to be transitioned to **Infrequent Access** 30 days later, transitioned to **Archive** 60 days later, and deleted 100 days later, then OBS will transition **log/ clientlog.log**, **log/serverlog.log**, **log/test1.log**, and **log/test2.log** to **Infrequent Access** on the 31st day, transition them to **Archive** the 61st day, and delete them on the 101st day, respectively.

Step 5   Click **OK** to save the lifecycle rule.

----End

Related Operations

After the configuration is complete, you can edit, delete, enable, or disable the configured rule if necessary.

7.3 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.

7.3.1 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.

> **NOTICE**
>
> For more information, see **Bucket Policies**.

7.3.2 Configuring a Bucket Policy

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

Procedure

Step 1 Log in to OBS Browser+.

Step 2 Select the bucket you want and choose **More** > **Bucket Policy**. The window shown in **Figure 7-4** is displayed.

Figure 7-4 Configuring a bucket policy

Step 3 Enter a bucket policy in the following format.

1. 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**.

   ```
   {
       "Statement": [
           {
               "Sid": "testing",
               "Effect": "Allow",
   ```

```
        "Principal": {
            "ID": [
                "domain/783fc6652cf246c096ea836694f71855:user/*"
            ]
        },
        "Action": [
            "GetBucketLogging"
        ],
        "Resource": [
            "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 **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. For the actions supported by OBS, see **Bucket Actions**.
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.
783fc6652cf246c096ea83 6694f71855	ID of an account. You can change it as needed. You can obtain the account ID on the bucket's **Basic Information** page.

2. 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:

Table 7-5 Parameter changes

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. For the actions supported by OBS, see **Bucket Actions**.
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.
219d520ceac84c5a98b237 431a2cf4c2	ID of an account. You can change it as needed. You can click ⓘ next to the target bucket to obtain the **Account ID** on the **Basic Information** page.
71f3901173514e6988115e a2c26d1999	ID of a user under the account. You can change it as needed. You can choose **My Credentials** from the username in the upper right corner of OBS Console to obtain the **IAM User ID**.

For details about bucket policy parameters, see **Bucket Policy Parameters**.

----End

7.4 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.

7.4.1 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	- HeadBucket - ListBucket - ListBucketVersions - ListBucketMultipartUploads
	Write	- PutObject - DeleteObject - DeleteObjectVersion
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 **Allow**.	Select **Allow**.
Principal	* (Any user)	* (Any user)
Resources	* (All objects in a bucket)	* (All objects in a bucket)
Actions	- GetObject - GetObjectVersion - HeadBucket - ListBucket	- GetObject - GetObjectVersion - PutObject - DeleteObject - DeleteObjectVersion - HeadBucket - ListBucket

Parameter	Public Read	Public Read and Write
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.

7.4.2 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.

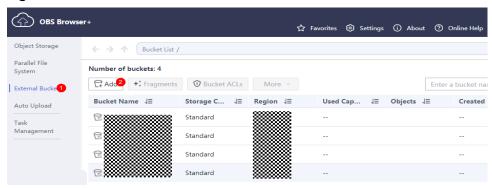Account A can obtain its account ID (same as the owner ID) from the **Basic Information** page of the bucket.

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**.
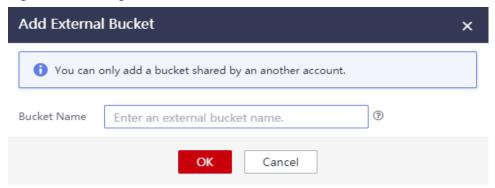
Procedure

Step 1 Log in to OBS Browser+.

Step 2 In the navigation pane, choose **External Bucket**, as shown in **Figure 7-5**.

Figure 7-5 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 7-6**.

Figure 7-6 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
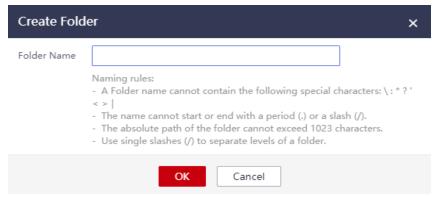
Create a folder on OBS Browser+.

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.

Procedure

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 upper-level 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.

☐ **NOTE**

If an access deny message is displayed when you are creating a folder, possible causes are as follows:

- Access to the bucket is restricted by an ACL. For example, you do not have the write permission for the bucket.

- Access to the bucket is restricted by a bucket policy. For example, you do not have the write permission for the bucket, or write operations cannot be performed on the bucket during the current period.

If such message is displayed, check ACL and policy settings of the bucket and resolve the problem accordingly.

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**.

Procedure

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**.

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.

☐ NOTE

1. If message "Service Unavailable" is displayed when files are being uploaded, try again later.
2. If an access deny message is displayed when you are uploading a file or folder, possible causes are as follows:

- Access to the bucket is restricted by an ACL. For example, you do not have the write permission for the bucket.
- Access to the bucket is restricted by a bucket policy. For example, you do not have the write permission for the bucket, or write operations cannot be performed on the bucket during the current period.

  If such message is displayed, check ACL and policy settings of the bucket and resolve the problem accordingly.

⚠️ **CAUTION**

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.
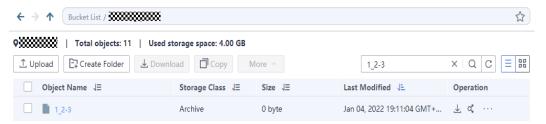
Step 5 Click **OK**.

----End

8.3 Searching for a File or Folder

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

Procedure

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 ✕ 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 $\mathbb{Q}$. 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.

☐ NOTE

- To download Archive files, you must restore them first. For details, see **Restoring an Object**.
- Only files or folders that have been listed can be downloaded in batches. You can drag the scroll bar to the bottom to update the number of listed files or folders. 100 files or folders can be updated at a time.

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.

☐ NOTE

- 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 and costs.

You can use lifecycle management to periodically delete some unwanted files or batch delete all files or folders in OBS buckets. For details, see **Configuring a Lifecycle Rule**.

Procedure

Step 1 Log in to OBS Browser+.

Step 2 Go to the bucket from which you want to delete a file or folder.

Step 3 Right-click the file or folder to be deleted and click **Delete**.

You can select multiple files or folders and choose **More** > **Delete** above the list to batch delete them.

Step 4 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 delete directories in either of the following ways:

1. On the Hadoop client that has OBSA, an OBS client plugin, embedded, run the **hadoop fs - rmr obs://{**_Name of a parallel file system_**}/{**_Directory name_**}** command.
2. Configure a lifecycle rule for directories so that they can be deleted in background based on the preset lifecycle rule.

8.8 Sharing a File or Folder
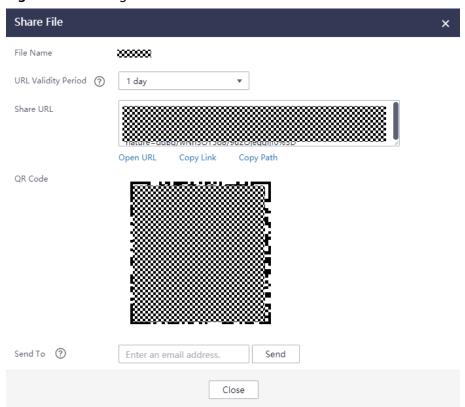
With the URL generated during object sharing, anonymous users can access the shared object.

Prerequisites

Anonymous users have been granted the permissions through OBS Console to read the specified object. For details about how to configure object ACL permissions, see **ACLs**.

Procedure

Step 1 Log in to OBS Browser+.

Step 2 Locate the object you want to share and click next to the object. The window shown in **Figure 8-4** or **Figure 8-5** is displayed.

Figure 8-4 Sharing a file
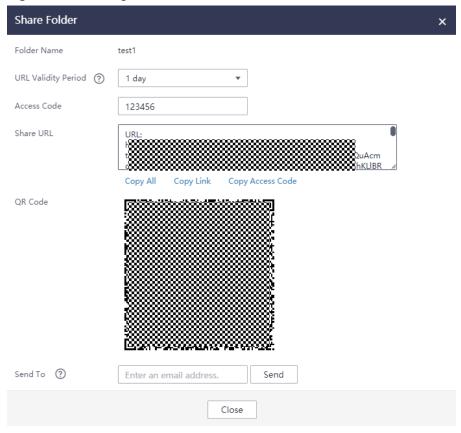
Figure 8-5 Sharing a folder

Step 3 Click **Copy Link** to copy the object link to a browser and open it. Then you can access the object.

☐ **NOTE**

To allow anonymous users to access Archive objects using URLs, ensure that these objects are in the **Restored** state.

----End

8.9 Restoring a File or Folder

Restore Archive objects before downloading them.

⚠ **CAUTION**

To prolong the validity period of the Archive data restored, you can repeatedly restore the Archive data, but you will be billed for each restore. After a second restore, the validity period of Standard object copies will be prolonged, and you need to pay for storing these copies during the prolonged period.

Context

Archive 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.
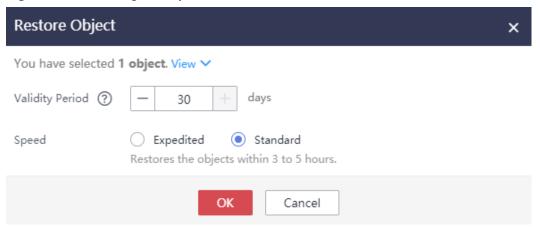
If an Archive object is being restored, you cannot suspend or delete the restore task.

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

Procedure

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**. The window shown in **Figure 8-6** is displayed.

Figure 8-6 Restoring an 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 **Restored** 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 **30**. For example, you set **Validity Period** to **20** when restoring an object. 20 days after the object is restored, its status will change from **Restored** to **Unrestored**.

Parameter	Description
Speed	How fast an object will be restored. ● **Expedited**: Data smaller than 250 MB can be restored within 1 to 5 minutes. ● **Standard**: All Archive data can be restored within 3 to 5 hours.

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
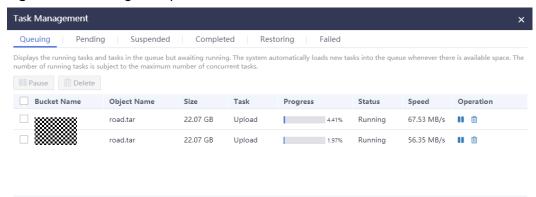
Prerequisites

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** (🗑).

----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** (🗑).
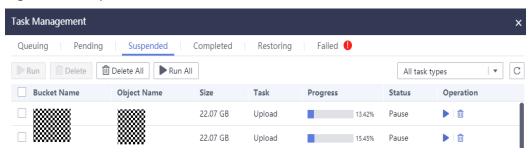
----End

9.3 Managing Completed Tasks

Prerequisites

There are completed 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 **Completed** tab.

Figure 9-3 Completed task list

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

----End

> ⚠ **CAUTION**
>
> 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?**
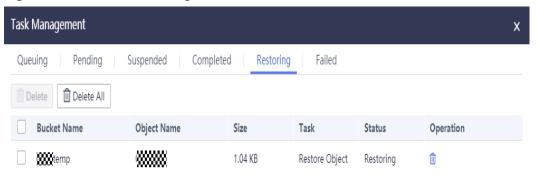
9.4 Managing Tasks Being Restored

Prerequisites

There are tasks being restored in the list.

Procedure

Step 1 Log in to OBS Browser+.

Step 2 In the navigation pane, choose **Task Management**.

Step 3 Choose the **Restoring** tab.

Figure 9-4 List of tasks being restored

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

----End

> ⚠ **CAUTION**
>
> - If an Archive object is being restored, you cannot suspend or delete the restore task.
> - Objects in the **Restoring** state cannot be restored again.
> - The **Delete** function can delete only local task data.
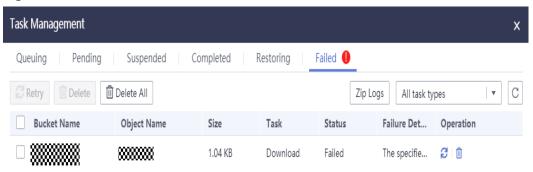
9.5 Managing Failed Tasks

Prerequisites

There are failed 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 **Failed** tab.

Figure 9-5 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
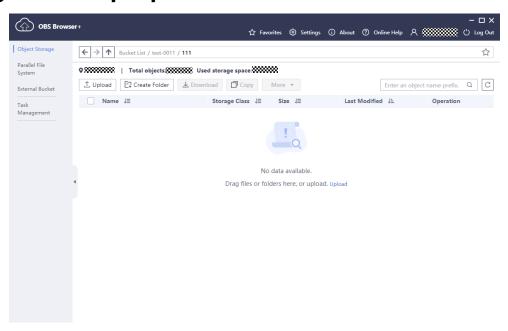
⚠ **CAUTION**

- A failed task will be automatically retried three times.

---

10 Best Practices

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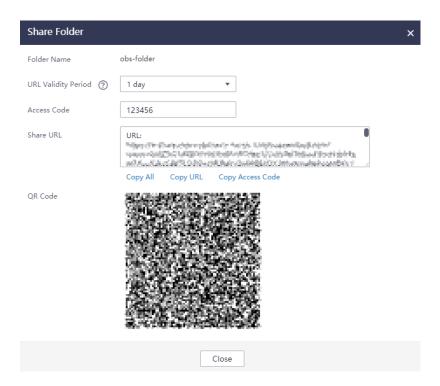
OBS Browser+ supports upload by drag and drop. You can drag one or more files or folders from a local path and drop them to the object list or file list. You can even drag files or folders directly to a specified folder. Drag-and-drop upload helps you easily upload local files to OBS.

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.

Share Folder ✕

Folder Name   obs-folder

URL Validity Period ⑦   1 day   ▾

Access Code   123456

Share URL   URL:

Copy All   Copy URL   Copy Access Code

QR Code

Close

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

Finally, you can send the generated sharing link or QR code to others. After obtaining the link information, they can use the authorization code to log in to OBS Browser+ and access the shared directory. Alternatively, they can scan the QR code and enter the access code to 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?
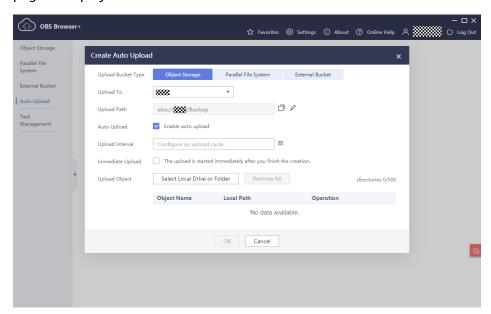
To enter background running mode, click the close icon in the upper right corner of OBS Browser+ and select **Background Running** in the **Exit OBS Browser+** dialog box. Then, all your tasks will run in the background.

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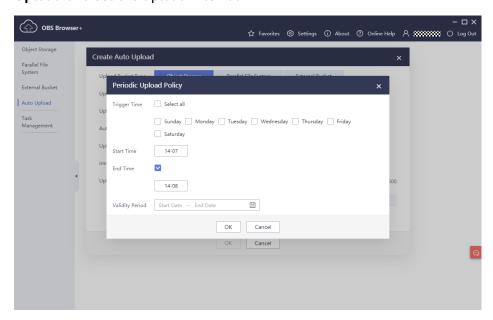
10.4 Auto Upload

OBS Browser+ supports auto upload. You can periodically upload one or more files from your local disk or directory to the corresponding path of the destination bucket.

Go to the **Auto Upload** page and click **Upload Now**. The **Create Auto Upload** page is displayed.

Select a bucket type, bucket path, and upload object. You can also enable **Auto Upload** and set the upload interval.

Click **OK**. OBS Browser+ will automatically upload files at the time you specified.

> ⚠ **CAUTION**
>
> - Once you modify the auto upload settings of a task, a new task will be created and overwrite the modified one.
> - When you compare each local file with data in the bucket, a billable HEAD request is generated. For details, see **Requests**.
> - Auto upload supports fewer than 100,000 files. If you want to periodically upload more than 100,000 files, see **Configuring Scheduled Tasks Using the Crontab Command**.
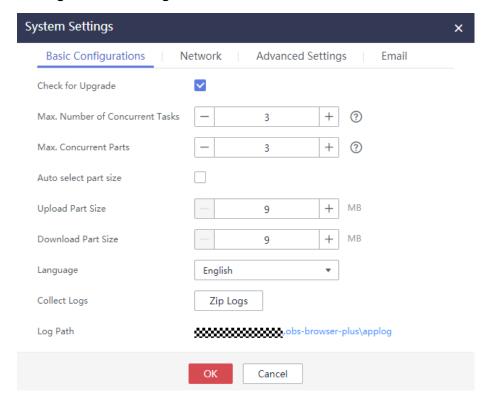
> 📖 **NOTE**
>
> Once the upload period starts, OBS Browser+ scans the files to upload on your local computer and compares them with the objects stored in the corresponding path of the destination bucket. OBS Browser+ uploads the files only when the objects do not exist, the objects and files are inconsistent in size, or the objects were last modified earlier than the files.

10.5 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 **3**.
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 **3**.
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)?

 NOTE

> To access OBS using access keys as an IAM user, the programmatic access must be enabled by the account. For details, see **Viewing or Modifying IAM User Information**.
>
> To access OBS in the EU-Dublin region, contact the administrator to obtain an access key pair. For details, see **How Do I Obtain an Access Key (AK/SK) in the EU-Dublin Region?**

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 console.

Step 2 Hover over the username in the upper right corner and choose **My Credentials** from the drop-down list.

Step 3 Choose **Access Keys**.

Step 4 Click **Create Access Key**.

Step 5 Enter an access key description (optional) and click **OK**.

Step 6 Enter the verification code sent to your mobile phone, virtual MFA device, or email, and click **OK**.

 NOTE

> This step is required only when you have enabled operation protection.

Step 7 Click **Download** to obtain the access key file.

 NOTE

> Keep AKs and SKs properly to prevent information leakage.

----End

11.2 Where Can I Obtain an IAM User ID?

Step 1 Log in to the **Huawei Cloud official website**.

Step 2 In the upper right corner, click **Console**.

Step 3 Hover your cursor over the username in the upper right corner and choose **My Credentials**.

Step 4 On the **API Credentials** page, view the account name, account ID, IAM username, IAM user ID, project name, and project ID.

----End

11.3 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.

11.4 What Are the Differences Between OBS Browser+ and OBS Browser?

OBS Browser+ is an upgraded edition of OBS Browser, with the brand-new GUI offering optimized user experiences. In addition, OBS Browser+ provides more login options, better performance, and higher efficiency.

11.5 Does OBS Browser+ Support the Migration of Account and Task Information from OBS Browser?

OBS Browser+ can migrate only the account information kept by OBS Browser, but not the task information. You can migrate such information only once, therefore, you are advised to stick to OBS Browser+ once you start to use it.

11.6 Why Does the Task Processing Speed Slow After the Number of Tasks Exceeds a Million?
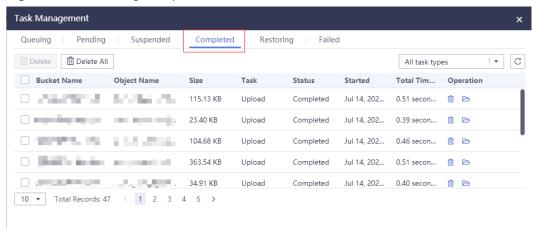
Cause

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 **Figure 11-1**.

Figure 11-1 Deleting completed tasks

11.7 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.

11.8 Why Is the Deliver Attribute Configured Using an SDK Overwritten to False After I Configure a Bucket ACL on OBS Browser+?

OBS Browser+ does not allow objects to inherit permissions from buckets. To achieve that, use **OBS SDKs** to perform required operations.

11.9 What If "Login request denied." Is Displayed When I Try to Log In to OBS Browser+ Using an Account?

This happens when your identity authentication on the **IAM console** fails.

To resolve this problem, perform the following steps:

Step 1 Contact the security administrator of the tenant to log in to the **IAM console**.

Step 2 Check whether the user corresponding to the AK is disabled.

Step 3 Check whether the programmatic access is enabled for the user.

Step 4 Check whether the user has been authorized to log in to OBS Browser+.

Step 5 Check whether login is allowed in the user policy.

----End

11.10 What If "Failed to obtain the user token from IAM." Is Displayed When I Try to Log In to OBS Browser+ Using an Account?

This happens because the HTTP header size is limited by Node.js. Try to set the system environment variables as follows to resolve this problem.

With Windows 10 (64-bit) as an example, perform the following steps:

Step 1 Choose **Settings** > **System** > **About**.

Step 2 Choose **System info** > **Advanced system settings**. In the displayed **System Properties**, click **Environment Variables**.

Step 3 Click **New User Variable** or **New System Variable**, set **Variable name** to **NODE_OPTIONS** and **Variable value** to **--max-http-header-size=32768**, and click **OK**.

Step 4 Restart OBS Browser+ and log in to it.

----End

📖 **NOTE**

This solution may make some software unavailable.

11.11 What If Message "Incorrect Account or Password" Is Displayed When I Try to Log In to OBS Browser+ Using an Account?

The possible causes are as follows:

- The account or password entered is wrong.
- If both the account and password are correct, your account may be a HUAWEI ID, instead of a Huawei Cloud account. Currently, IAM cannot obtain an account token from a HUAWEI ID, so using a HUAWEI ID to directly log in to OBS Browser+ will fail.

You can use either of the following methods to log in to OBS Browser+:

- Use access keys (AK and SK). For details, see **Login with a Permanent AK/SK Pair**.
- Use an IAM user. Specifically, use a Huawei account to log in to the Huawei Cloud console, **create an IAM user**, and grant the IAM user necessary permissions.

References:

1. **Granting All Operation Permissions on All OBS Resources to IAM User Groups**
2. **Obtaining a User Token Through Password Authentication**
3. **What Are the Relationships Between a Huawei Cloud Account, HUAWEI ID, IAM User, and Federated User?**
4. **How Do I Know What Account I Am Logged In With?**

11.12 Will Incremental Upload Be Used in Auto Upload Tasks?

In an auto upload task, incremental objects are uploaded by default. Once the upload period starts, OBS Browser+ scans the files to upload on your local PC and compares them with the objects stored in the corresponding path of the destination bucket. OBS Browser+ uploads the files only when the objects do not exist, the objects and files are inconsistent in size, or the objects were last modified earlier than the files.

⚠ **CAUTION**

Once you modify the auto upload settings of a task, a new task will be created and overwrite the modified one. Therefore, when the new task starts after the modification, OBS Browser+ will perform a full upload first.

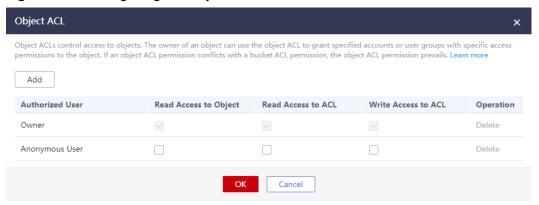# 11.13 How Can I Permanently Share Files or Folders with Other Users?

You can use OBS Browser+ to share files or folders with other users through URLs. These URLs are valid for only a certain period. Once they expire, files or folders will not be accessed.

- To share a file permanently, configure this file to be accessible from anonymous users, so anonymous users can access the file through the URL you shared.

- To share a folder permanently, configure a bucket policy that makes the objects prefixed with a certain folder readable for the public, so anonymous users can access all objects under that folder.

Configuring the Object ACL

Step 1 Log in to OBS Browser+.

Step 2 Select the object you want to configure the ACL for and choose **More** > **Object ACL** above the object list.

Step 3 Configure the ACL permissions as needed and click **OK**.

Figure 11-2 Configuring the object ACL

----**End**

For details about how to configure a bucket policy and how to obtain an object URL, see **Bucket Policy** and **How Do I Obtain the Access Path to an Object?** respectively.

11.14 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.

11.15 Can I Cancel the Directory Sharing After a Directory Has Been Shared with Others?

No.

URLs for sharing objects or directories through OBS Browser+ have a validity period. During the validity period, the sharing cannot be canceled.

Therefore, exercise caution when selecting a URL validity period and when selecting the objects or directories you want to share.

11.16 Can I Query the Number and Size of Files in a Folder?

OBS Browser+ does not support this function. You can run the obsutil command of listing objects. In this command, specify the prefix to the name of the folder to be queried. For details, see **Listing Objects** in the obsutil guide.

Take Linux OS as an example. Run the **./obsutil ls obs://bucket-test/test/ -du -limit=0** command to query the size of the **test** folder in bucket **bucket-test**.

```
./obsutil ls obs://bucket-test/test/ -du -limit=0

Start at 2023-03-16 06:40:18.2773873 +0000 UTC

Listing objects .

Remove the -du parameter to view more information
[DU] Total prefix [test/] size: 990.85MB
```
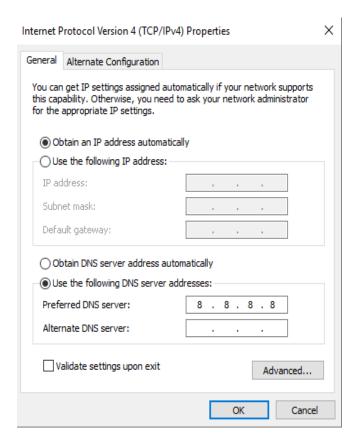
⚠️ **CAUTION**

● The **-du** parameter is only supported by obsutil 5.4.6 and later.

11.17 How Do I Troubleshoot a DNS Resolution Failure?

This is a network problem. You can open file **obssdk.log** and view the latest logs that contain the key error information shown below to help you locate the fault.


```
2022/05/15 15:50:10 526|30896|ERROR|at LogUtil._doLog
(C:\Users███████████████████████████████████████-obs-nodejs\lib\log.js:126:19)|
HeadApiVersion|Send request to service error [{"errno":-3008,"code":"ENOTFOUND","syscall":"getaddrinfo",
"hostname":"obs████████████huawei.com"}]
```

To resolve this problem, perform the following steps:

Step 1 Check whether your local DNS server is correctly configured. In this example, DNS settings on a Windows platform will be checked.

1. Choose **Control Panel** and view by **Category**. Then choose **Network and Internet** > **Network and Sharing Center** > **Change adapter settings**.

2. Right-click the connection you want to configure and choose **Properties** from the drop-down list.

3. Click **Internet Protocol Version 4 (TCP/IP)** and then **Properties** to view the DNS server address settings.

You can change the DNS server address to **8.8.8.8** or **114.114.114.114**.

Step 2 Correct the server address if it is incorrect.

For example, if the log shows that it is the **obs.huawei.com** address that failed to be resolved, open the Command Prompt (the Windows CLI) and ping this address to check whether the address can be resolved by DNS.

If the resolution fails, check whether the address was wrongly configured.

----End

11.18 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.

11.19 Why Are Objects Always in the Restoring State?

If there are millions of tasks in OBS Browser+, OBS Browser+ will spend much more time in searching. Therefore, when a such number of objects are being restored, it takes a long time for OBS Browser+ to get the actual restore status,

while the restore requests may have already been successful. You can check the actual object status on the server or using other methods. The finished restored tasks will be automatically synchronized to the list of completed tasks.

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