

 **NOTE**

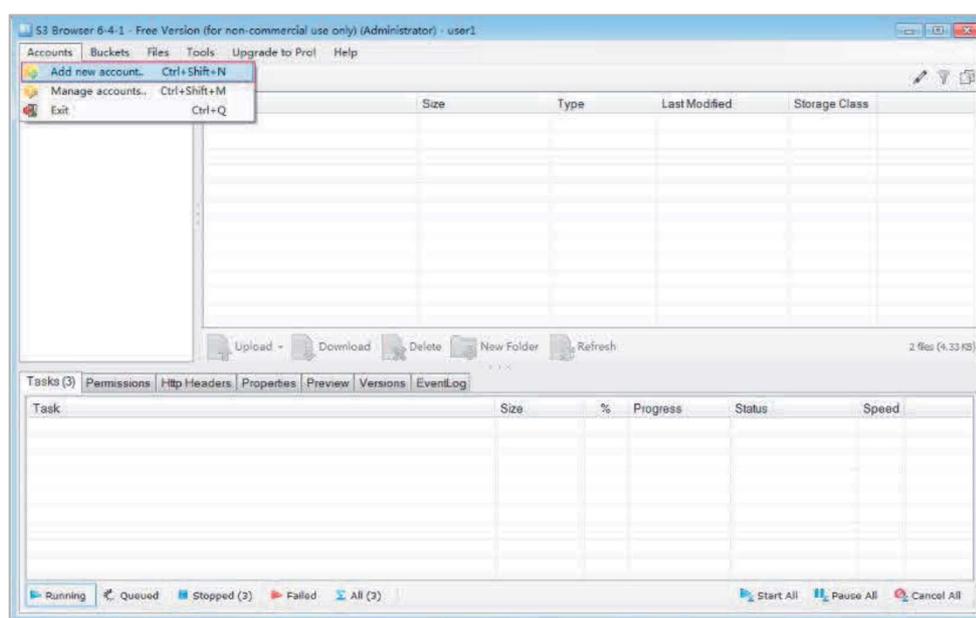
1. If a bucket's lifecycle management rule applies to objects, and the **Delete data that has not been uploaded in segments yet** is enabled, the retention days defined by the rule shall prevail.
2. If no lifecycle management rule of a bucket applies to objects, and the **Delete data that has not been uploaded in segments yet** is disabled, the retention days defined here shall prevail.
3. The configuration here can be enabled and disabled dynamically without affecting the production during the process. The time range is between 1 to 30 days.

4.2.5 Object Storage Usage

The client implements data upload and download through the **S3 Browser**. Before using S3 Browser, you need to create an object storage user on the EDS cluster and download the key pairs file for the newly created user.

4.2.5.1 Connect Object Storage

1. Create a new object storage bucket where the bucket name is **bucket1**, the owner is **test02**, and it has read, write, and delete permissions.
2. Configure the user account in the S3 Browser, **Accounts > Add new account**.



- Fill in the relevant parameters. The explanation of each parameter is as follows:



The screenshot shows a window titled "Add New Account" with a sub-header "Add New Account" and a link for "online help". Below the header is a prompt: "Enter new account details and click Add new account". The form contains the following fields and options:

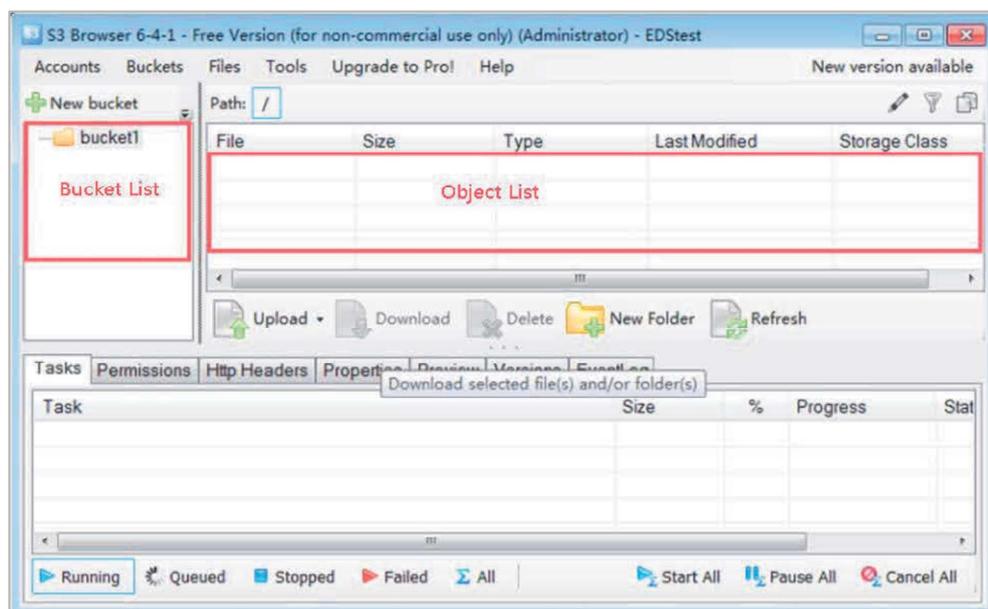
- Account Name:** A text input field containing "EDStest". Below it is the instruction: "Assign any name to your account."
- Account Type:** A dropdown menu set to "S3 Compatible Storage". Below it is the instruction: "Choose the storage you want to work with. Default is Amazon S3 Storage."
- REST Endpoint:** A text input field containing "192.200.244.54:12000". Below it is the instruction: "Specify S3-compatible API endpoint. It can be found in storage documentation. Example: rest server com:8080."
- Access Key ID:** A text input field containing "7R5NWRQ7QVWTYSJWSW". Below it is the instruction: "Access Key ID can be found here: https://console.aws.amazon.com/iam/home?#security_credential"
- Secret Access Key:** A text input field filled with dots. Below it is the instruction: "Secret Access Key can be found here: https://console.aws.amazon.com/iam/home?#security_credential"
- Encrypt Access Keys with a password:** An unchecked checkbox with a text input field below it. The instruction says: "Turn this option on if you want to protect your Access Keys with a master password."
- Use secure transfer (SSL/TLS):** A checked checkbox. The instruction says: "If checked, all communications with the storage will go through encrypted SSL/TLS channel."

At the bottom right, there are two buttons: "Add new account" (with a green checkmark icon) and "Cancel" (with a red X icon). At the bottom left, there is a link: "Click here to sign up for Amazon S3".

- **Account Name:** Account display name.
- **Account Type:** Must be set to S3 Compatible Storage for aStor products.
- **REST Endpoint:** Server address, one of the IP addresses in the aStor virtual IP pool + port number. The client connection must use the virtual IP in the virtual IP pool to have a high availability feature.

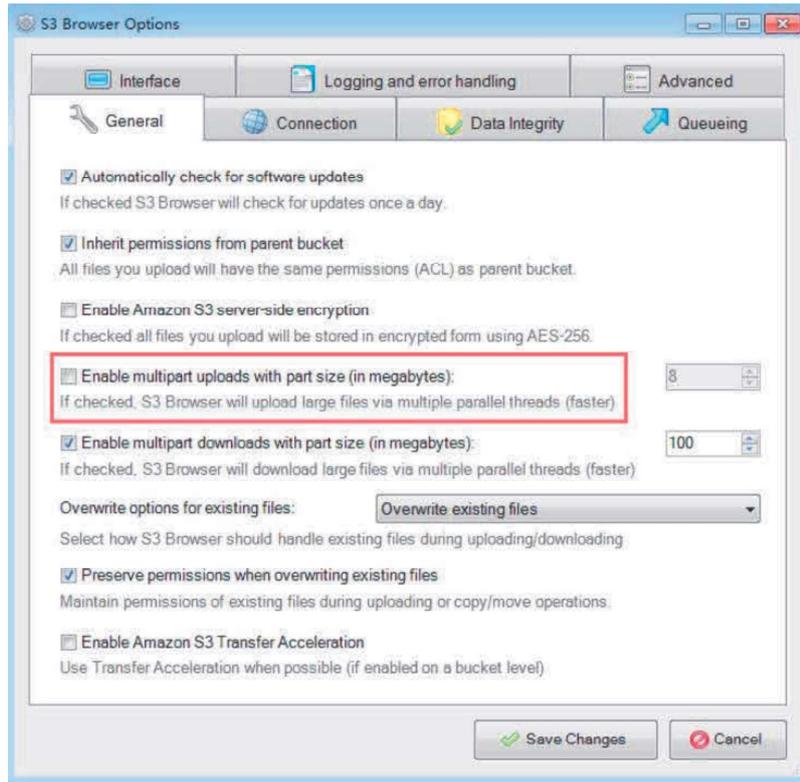
For example, **192.168.0.1:12000** or **192.168.0.1:12001** (12001 uses HTTP, and 12000 uses HTTPS, which requires enabling the SSL/TLS option).
- **Access Key ID:** Use the Access Key downloaded from aStor object user's key pair file.
- **Secret Access Key:** Use the Secret Key downloaded from aStor object user's key pair file.
- **Encrypt Access Keys with a password:** Optional to encrypt the AK, recommend do not enable this item.
- **Use secure transfer (SSL/TLS):** Optional to use HTTPS, this field corresponds to the port number configured in the **REST Endpoint**.

4. Select **Add new account**, and the S3 Browser will automatically connect to the aStor object user account. After the connection is successful, it will display the Bucket list that belongs to the object user, as shown in the figure below:

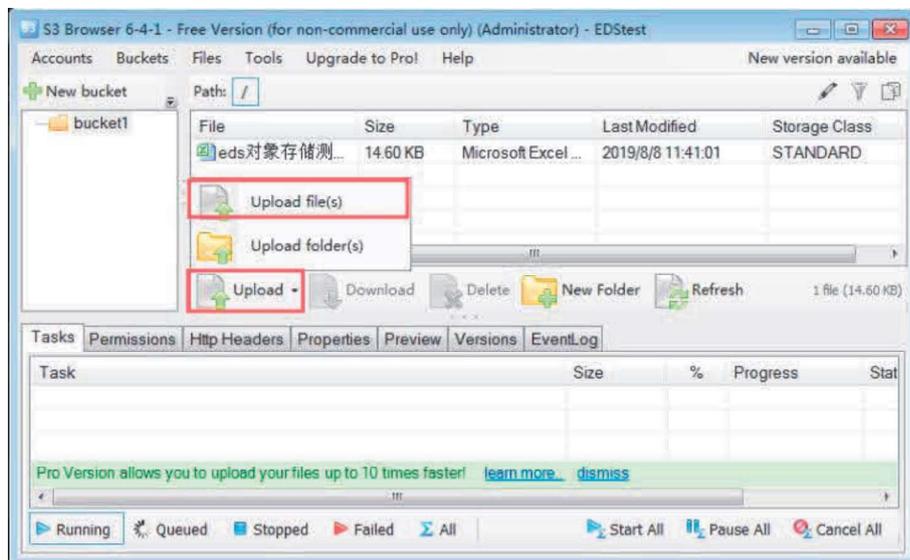


4.2.5.2 Upload as Whole

1. Select **Tools > Options > General** in the S3 Browser, uncheck the **Enable multipart uploads with part size**, and the file will be uploaded as a whole.



2. Select a bucket (E.g., bucket1), and upload a local file. After the object is successfully uploaded, it will show the uploaded local file object in the object list of the selected bucket.

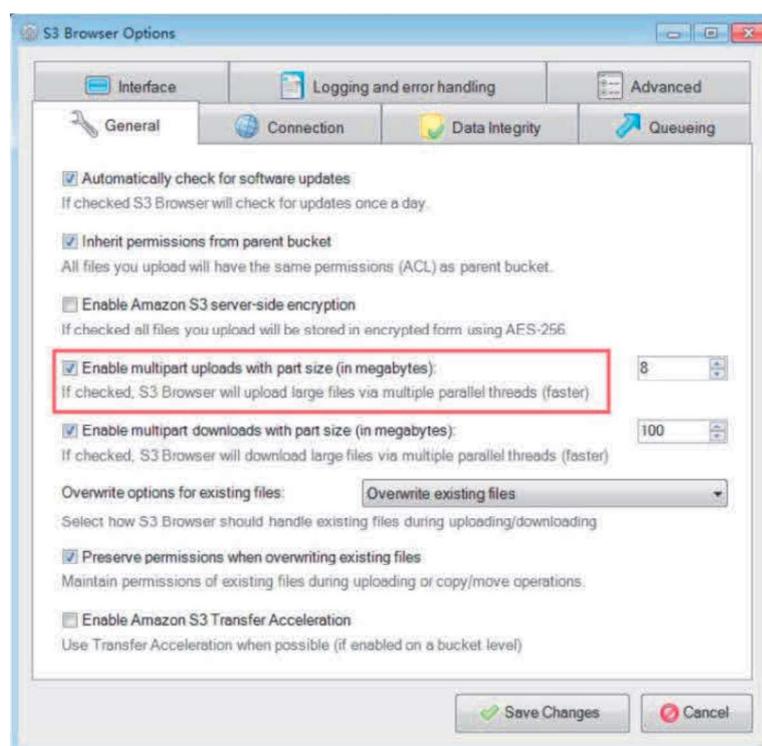


4.2.5.3 Upload as Multipart

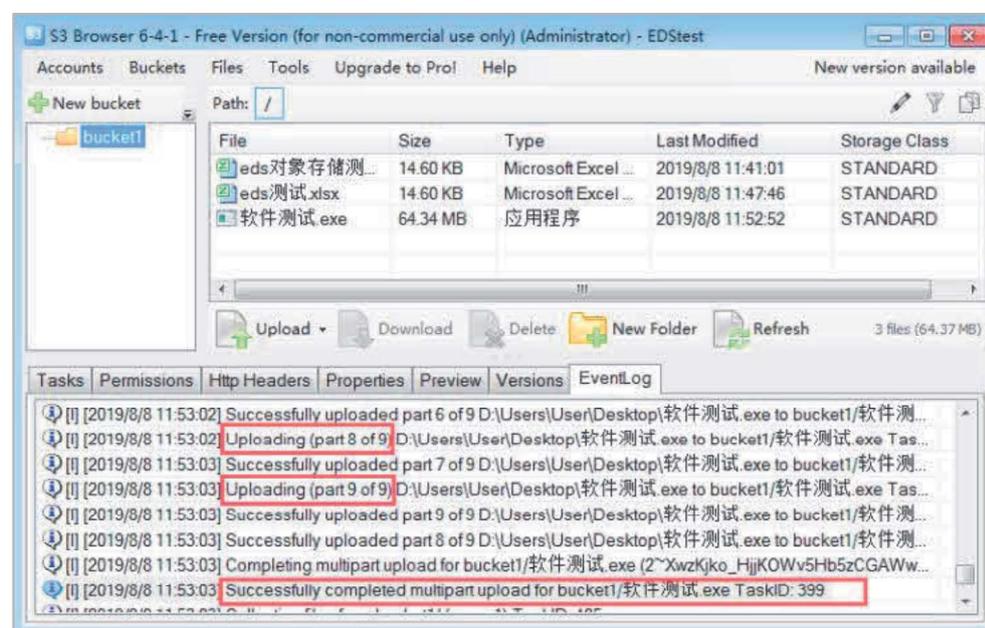
The file to be uploaded will be divided into the preset fragment size for uploading, known as multipart upload.

1. Select **Tools** > **Options** > **General** in the S3 Browser, check the **Enable**

multipart uploads with part size, and the file will be uploaded as multipart.



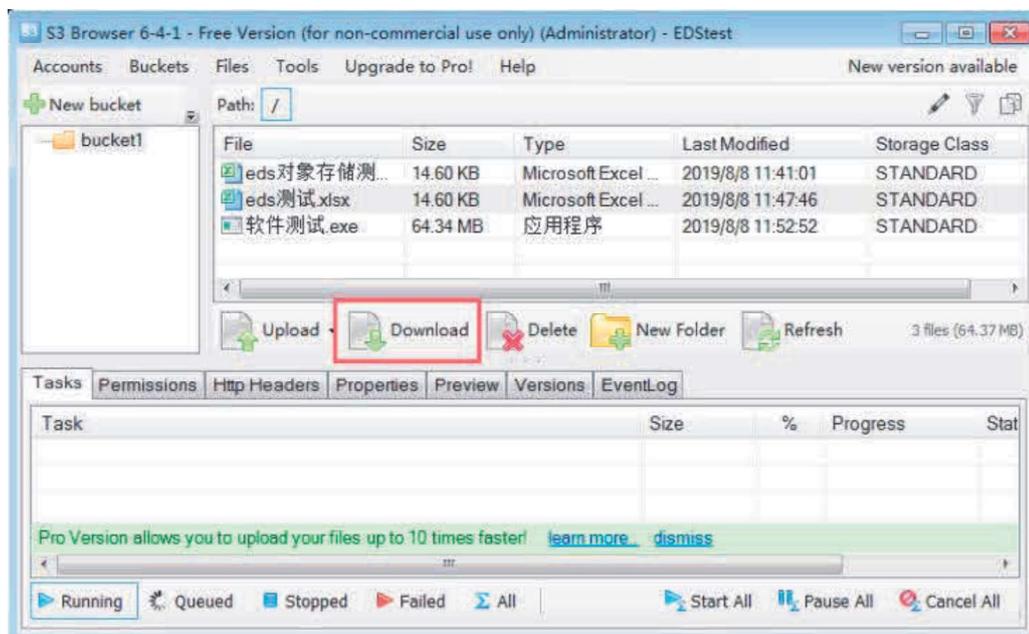
- The files will be uploaded in multipart. After the object is uploaded successfully, it will show the uploaded local file object in the object list of the selected bucket. You can see the multipart upload log in Eventlog.



4.2.5.4 Download Object

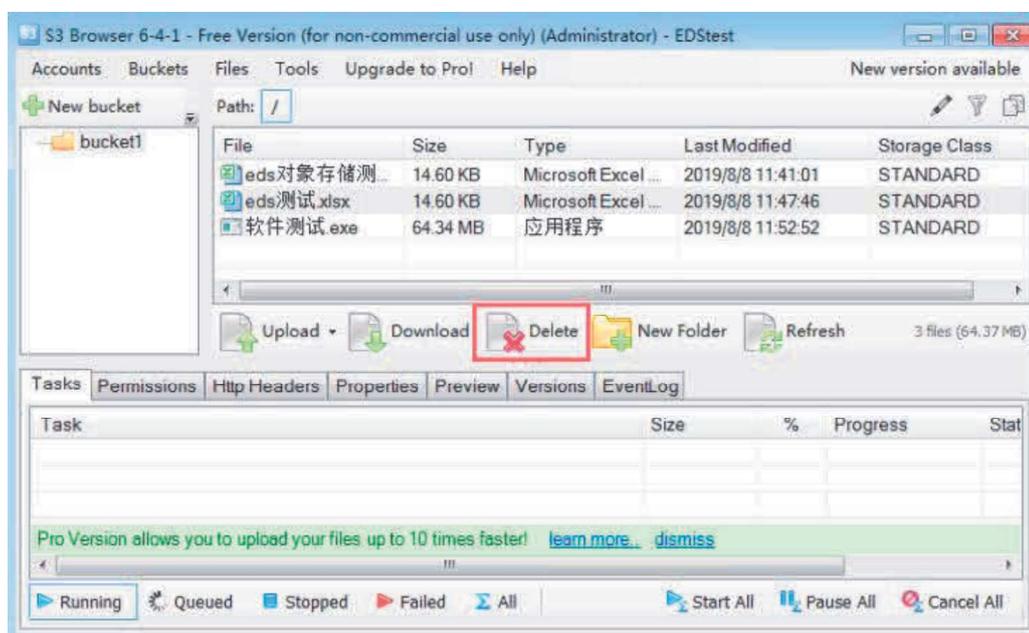
Select the file object to be downloaded in the bucket object list. Then, click

Download, and select the download path. After the object is downloaded successfully, you can see the downloaded file in the selected local path.



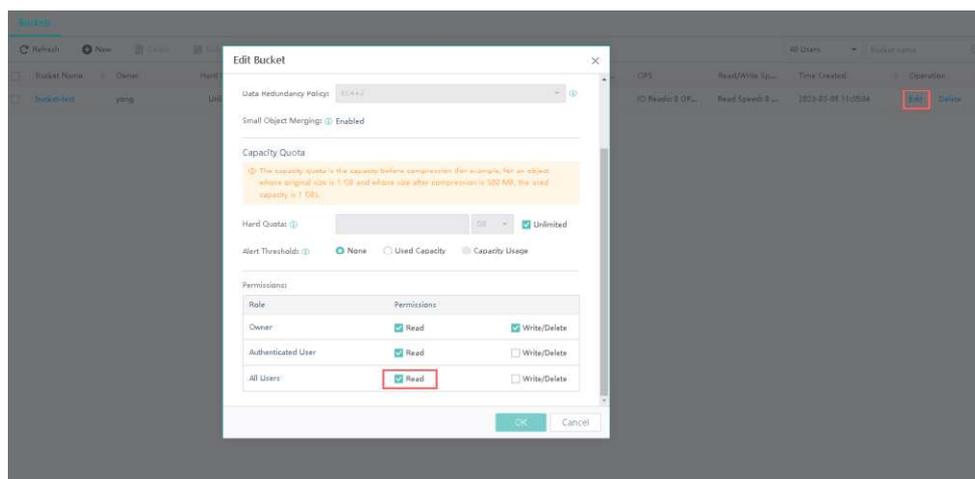
4.2.5.5 Delete Object

Select an object in the bucket object list, and click **Delete**.

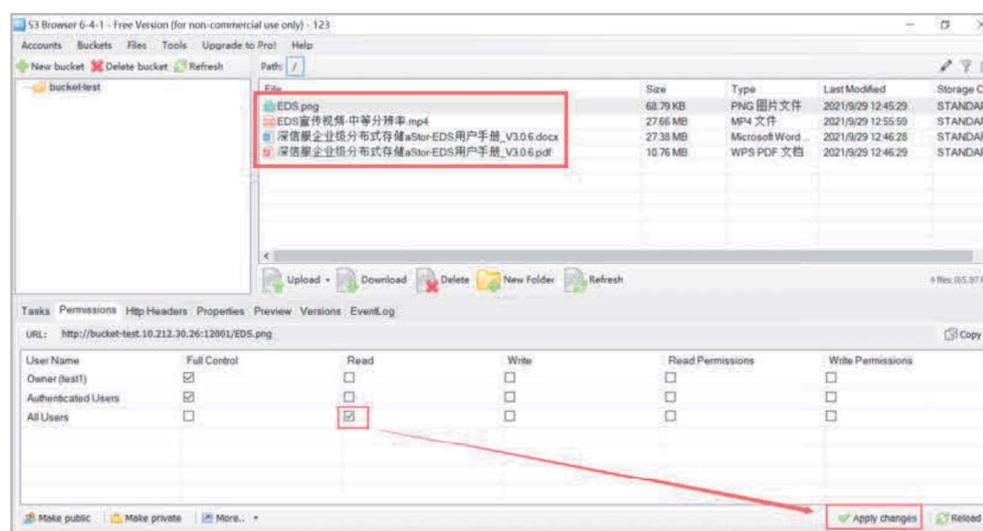


4.2.5.6 Webpage Access

1. Edit the Bucket on aStor and enable all users with **Read** permission.



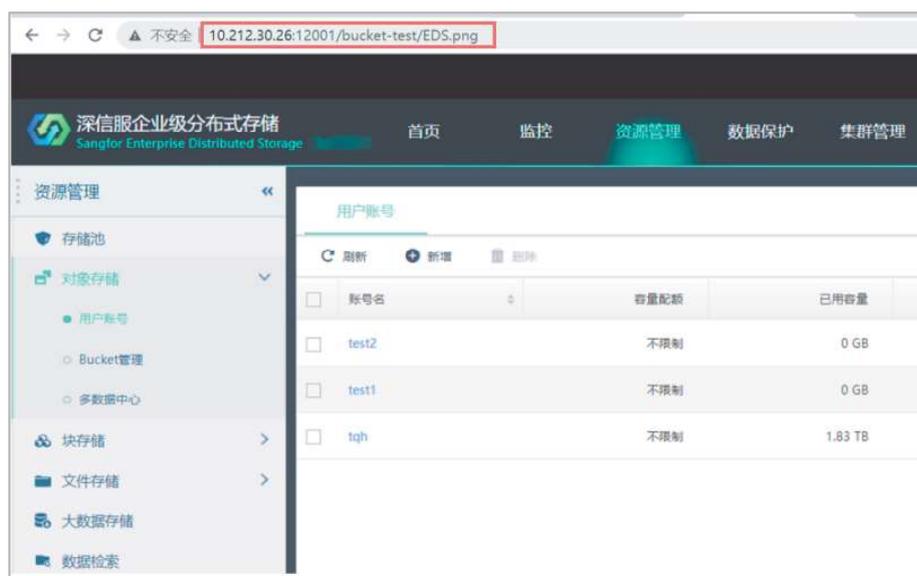
- At the same time, assign **Read** permission to the accessed files to all users through the S3 browser client.



- Next, access the object storage resources on the aStor through the web browser.

The access method is as below:

- <http://object storage virtual IP:12001/bucket name/file name>.
- <https://object storage virtual IP:12000/bucket name/file name>.



4.3 Block Storage

EDS block storage creates SAN storage based on local general hardware through storage virtualization technology. It provides iSCSI (VMware virtualization scenario), supports various virtualization platforms and database applications, provides high performance and scalability, and meets high-performance SAN scenarios.

4.3.1 Access Settings

4.3.1.1 Global iSCSI Authentication Settings

1. Go to **Resources** > **Block Storage** > **Access Setting**.