Object Storage Service

Best Practices (Kuala Lumpur Region)

Issue	01
Date	2022-08-16

HUAWEI TECHNOLOGIES CO., LTD.

Contents

1 Accessing OBS from an ECS over the Intranet

1.1 Overview

Application Scenario

An enterprise runs its basic businesses on Elastic Cloud Servers (ECSs). As its data grows, the disks cannot meet the storage and access requirements for a large number of images and videos. After learning that the scalable OBS is available for storing massive amounts of data, the enterprise decided to use OBS as its data storage pool to reduce the burden on servers.

You can access OBS from ECSs over both the internet and intranet. Accessing OBS from the internet is subject to network conditions and incurs data read traffic fees. To maximize performance and reduce costs, enterprise administrators want to access OBS over the intranet.

◻ NOTE

To access OBS over the intranet, the OBS resources you want to access must be in the same region as the ECS. If they are in different regions, you can access OBS resources only over the internet.

Solution Architecture

Configure an intranet DNS on the established ECS. The intranet DNS resolves the OBS domain name so that the ECS can access OBS through the intranet. **Figure 1-1** shows the access process.
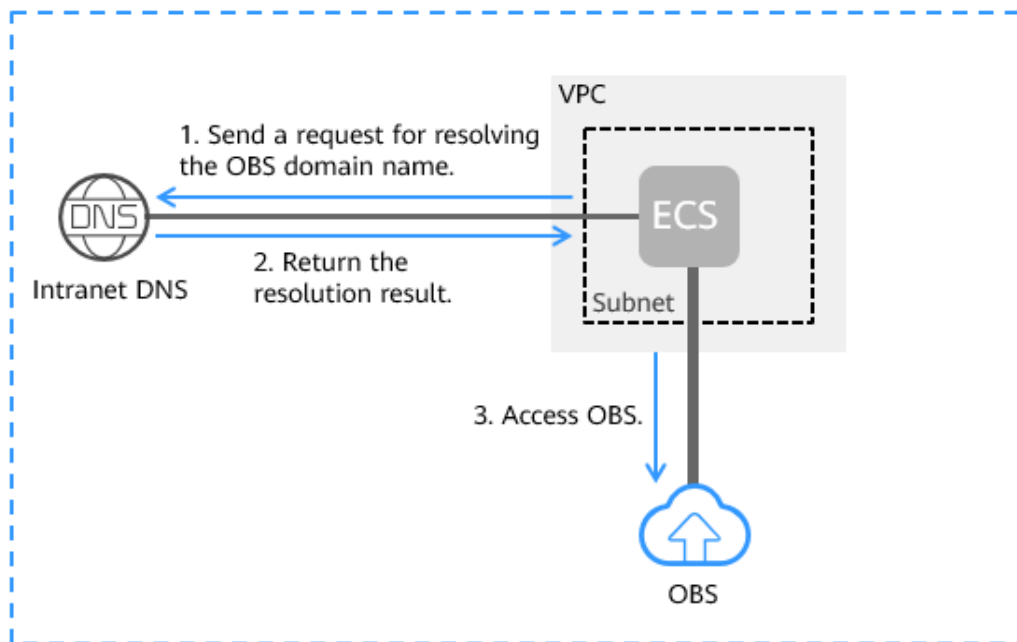
Figure 1-1 Accessing OBS over the intranet

[Table 1-1](#) describes the services in the figure.

Table 1-1 Service description

Service	Description
Virtual Private Cloud (VPC)	VPC enables users to create an isolated virtual network environment defined and managed by themselves, improving security of resources in the cloud and simplifying network deployment. A subnet is a network that provides IP address management and DNS services for the ECS in a VPC. IP addresses of an ECS must be in the same subnet.
Domain Name Service (DNS)	Intranet DNS is provided for resolving intranet domain names and OBS domain names. This simplifies the domain name resolution process and reduces costs on data transfer over the Internet.

- For Windows ECSs, you are advised to use OBS Browser+ to access OBS over intranet. For details, see:

  Accessing OBS over Intranet by Using OBS Browser+ on a Windows ECS

When accessing OBS through the intranet from your ECSs, you can read, back up, and archive data without affecting the internet bandwidth.

1.2 Using OBS Browser+ on a Windows ECS to Access OBS over the Intranet

OBS Browser+ is a graphical interface tool for managing OBS resources. You can configure a private DNS server address to access OBS over intranet from a Windows ECS.

⚠ **CAUTION**

You need to download OBS Browser+ over the Internet. Alternatively, you can download OBS Browser+ on a cloud server that can access the Internet and then transfer the downloaded OBS Browser+ to the current cloud server for installation.

Process

Figure 1-2 The process of using OBS Browser+ on a Windows ECS to access OBS over the intranet
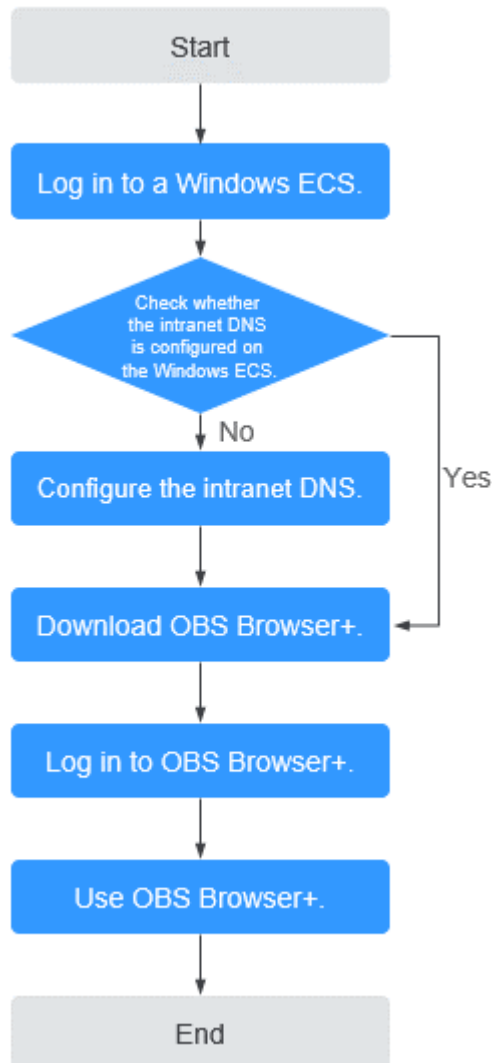
Procedure

Step 1 Log in to a Windows ECS.

1. Log in to the console.
2. In the service list, choose **Compute** > **Elastic Cloud Server**.
3. Select an ECS and log in to it.

   For details, see **Logging In to a Windows ECS**.

Step 2 Check whether the intranet DNS is configured on the Windows ECS.

On the Windows ECS, you can view the current DNS settings by using the graphical user interface (GUI) or command line interface (CLI). In this example, CLI is used as an example to explain how to view the DNS settings.

1. After logging in to the ECS, open the CLI.

2. Run the **ipconfig /all** command to check whether the DNS server is at the intranet DNS address in the region where the ECS resides.

   📖 **NOTE**

   > DNS offers private DNS server addresses. For details, see **What Are the Private DNS Servers Provided by the DNS Service?**

   – If no, go to **Step 3**.

   – If yes, go to **Step 5**.

Step 3 Configure an intranet DNS.

Change the DNS server address of the ECS to the intranet DNS provided by DNS. To do this, you can change the DNS address of the VPC subnet or change the local DNS configuration.

● Method 1: Change the DNS server address of the VPC subnet.

  Locate the VPC where the ECS resides and change the DNS server address of the VPC subnet to the intranet DNS address. This way, ECSs in the VPC can use the intranet DNS for resolution and thereby you can access OBS over the intranet. For details, see **Modifying a Subnet**.

● Method 2: Modify the local DNS settings.

  The intranet DNS configured using this method becomes invalid once the ECS is restarted. Therefore, you need to reconfigure the intranet DNS after each restart of the ECS. In this example, CLI is used as an example to explain how to modify the DNS settings locally.

1. Open the cmd window.

2. Run the following command to configure the IP address of the primary DNS server:
   netsh interface ip set dns name="*Local connection*" **source=static addr=***Intranet DNS server address* **register**=**primary**

   📖 **NOTE**

   – *Local connection*: a NIC name. Use the actual NIC name when configuring the local DNS.

   – *Intranet DNS server address*: Select the intranet DNS server address based on the region where the ECS resides. For details, see **What Are the Private DNS Servers Provided by the DNS Service?**

3. (Optional) Run the following command to configure the IP address of the alternative DNS server:
   netsh interface ip add dns name="*Local connection*" addr=*Alternative DNS server address* index=2

   📖 **NOTE**

   – *Local connection*: a NIC name. Use the actual NIC name when configuring the local DNS.

   – *Alternative DNS server address*: The DNS server used when the primary DNS server is faulty, unavailable, or cannot resolve the requested domain name. You can set this parameter to the IP address of the intranet DNS server.

Step 4 Check whether OBS is accessed through the intranet.

On the ECS, **ping** the global domain name of the bucket to access. If the IP address that responds is in the range starting with **100**, the ECS is accessing the bucket through an intranet connection.

The global domain name of an OBS bucket is in the *Bucket name*.**obs.my-kualalumpur-1.alphaedge.tmone.com.my** format.

Step 5 Download OBS Browser+.

Go to OBS Console and click the download link to get the OBS Browser+ package.

Step 6 Log in to OBS Browser+.

For details, see **Logging In to OBS Browser+** in the *Object Storage Service Tools Guide (OBS Browser+)*.

Step 7 Use OBS Browser+ to access OBS.

After logging in to OBS Browser+, you can access OBS over the intranet from the Windows ECS to perform basic data access operations and configure other advanced settings.

For details, see **Object Storage Service Tools Guide (OBS Browser+)**.

----End

A Change History

Release Date	What's New
2022-08-16	This is the first official release.