Object Storage: Perform Multipart Upload Using CLI (Using Cloud Shell)

Lab 11-1 Practices

Get Started

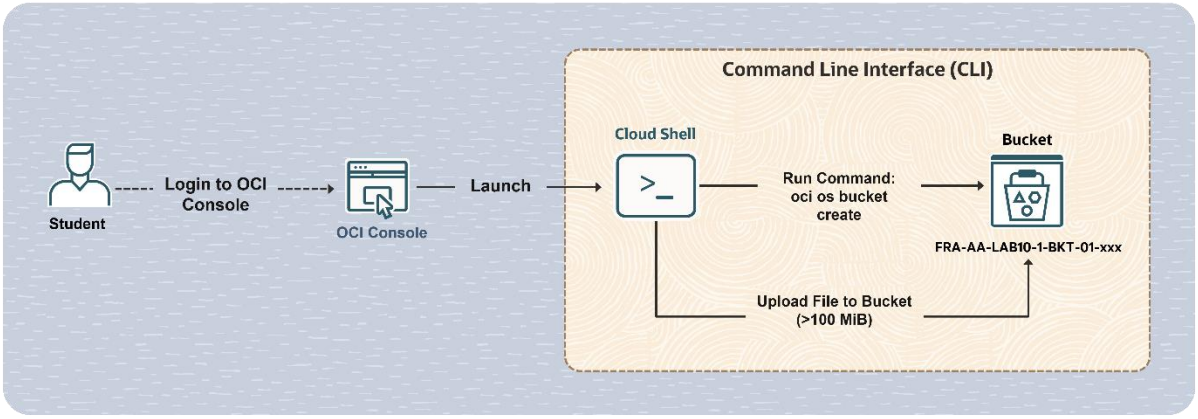
Overview

The Oracle Cloud Infrastructure (OCI) Object Storage supports multipart uploads for more efficient and resilient uploads, especially for large objects. With multipart uploads, the individual parts of an object can be uploaded in parallel to reduce the amount of time you spend uploading. In this lab, you will perform a multipart upload on the Command Line Interface (CLI) using Cloud Shell.

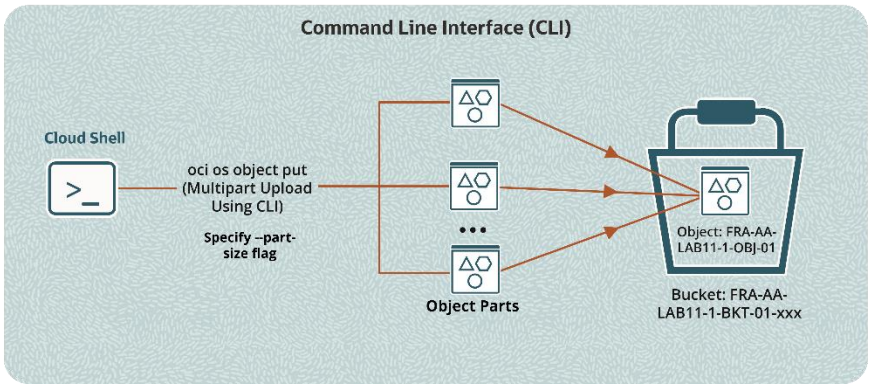
In this lab, you will:

- Access Cloud Shell via the Console
- Create a standard default storage tier bucket using CLI (Cloud Shell)
- Upload a file (larger than 100 MiB) to Cloud Shell
- Perform a multipart upload using the CLI (Cloud Shell)

Create a Standard default storage tier bucket using CLI (Cloud Shell) and Upload a File



Perform a multipart upload using the CLI (Cloud Shell)



Access Cloud Shell via the Console

The OCI Cloud Shell is a web browser–based terminal accessible from the Console. It provides access to a Linux shell, with a pre-authenticated OCI CLI.

In this practice, you will access Cloud Shell via the OCI Console.

Tasks

1. Sign in to your Oracle Cloud Infrastructure (OCI) Console.
2. In the console ribbon at the top of the screen, click the Region icon to expand the menu. Select **Germany Central (Frankfurt)** as the region.
3. Click the **Cloud Shell** icon next to the Region selection menu in the console header.

   Note: The OCI CLI running in the Cloud Shell will execute commands against the region selected when the Cloud Shell starts.
4. Now, the Cloud Shell is displayed in a "drawer" at the bottom of the Console.
5. You can use the icons in the upper-right corner of the Cloud Shell window to minimize, maximize, and close your Cloud Shell session.

Create a Standard Default Storage Tier Bucket Using CLI (Cloud Shell)

In the OCI Object Storage, a bucket is a container for storing objects in a compartment within an object storage namespace.

In this practice, you will create a standard default storage tier bucket using the CLI.

Tasks

1. Ensure that the Cloud Shell session is running.
2. Run the following command to get your object storage namespace:

   ```
   $ oci os ns get
   ```

   Reminder: Do not include the $ symbol when pasting code into Cloud Shell.

   Your object storage namespace is returned. Please make a note of it as you will be using it in the subsequent task.

3. Run the following command to get the OCID of the compartment. Replace *<compartment-name>* with the compartment name assigned to you.

   ```
   $ oci iam compartment list --name <compartment-name>
   ```

   Make note of the value corresponding to the "**id**" (without the ditto/quotation mark). You will use this in the subsequent task. The following is an example of how it looks:

   ```
   "id": "ocid1.compartment.oc1..xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
   ```

4. Create a bucket by using the following command.

   ```
   $ oci os bucket create --namespace <object_storage_namespace> --
   name <bucket_name> --compartment-id <target_compartment_id>
   ```

   - Replace <*object_storage_namespace*> with the name returned in Step 2.
   - Replace <*bucket_name*> with **FRA-AA-LAB11-1-BKT-01-*xxx***. Specify a random number in place of xxx to make it unique.
   - Replace <*target_compartment_id*> with the compartment ID returned in Step 3.

   A standard tier bucket is created immediately.

Upload a File (Larger than 100 MiB) to Cloud Shell

In this practice, you will transfer a file larger than 100 MiB (~105 MB) from your local machine to the Cloud Shell.

Tasks

1. Click the **Cloud Shell** icon next to the Region selection menu in the Console header.
2. In the Cloud Shell window, click the **Cloud Shell Menu** icon at the top-right corner and select **Upload**. The **File Upload to your Home Directory** dialog box appears.
3. Drag and drop a file or click **Select from your computer**.

   Note: The File Transfer dialog box supports selecting only one file at a time to transfer. Select any file larger than 100 MiB.

   Tip: You can optionally download a sample file which is around 247 MB from the following link.

   https://yum.oracle.com/ISOS/OracleLinux/OL6/u8/x86_64/x86_64-boot-uek.iso
4. Click **Upload**.
5. Wait for the file transfer to finish. The file transfers that are in-process are shown with a progress bar and the completed file transfers are shown with a green check mark.
6. After the file transfer is complete, you can hide the File Transfer dialog box by clicking **Hide.**

Perform a Multipart Upload Using the CLI (Cloud Shell)

In this practice, you will perform a multipart upload by using the CLI (Cloud Shell).

Tasks

1. Click the **Cloud Shell** icon next to the Region selection menu in the Console header.
2. To perform a multipart upload of an object, run the following command in Cloud Shell:

```
$ oci os object put --namespace <object_storage_namespace> --
bucket-name <bucket_name> --file <file_location> --name
<object_name> --part-size <upload_part_size_in_MB> --parallel-
upload-count <maximum_number_parallel_uploads>
```

   - Replace `<object_storage_namespace>` with the name returned in Step 2 of **Create a Standard default storage tier bucket using CLI (Cloud Shell)**.
   - Replace `<bucket_name>` with **FRA-AA-LAB11-1-BKT-01-*xxx*** that was created earlier.
   - Replace `<file_location>` with the path to the downloaded file that you uploaded to the Cloud Shell.
   - Replace **<***object_name***>** with **FRA-AA-LAB11-1-OBJ-01**.
   - The `--part-size` value represents the size of each part in mebibytes (MiBs). It must be an integer. Replace **<***upload part size in MB***>** with **20**.
   - Optionally, you can use the `--parallel-upload-count` flag to set the maximum number of parallel uploads allowed. By default, the CLI limits the number of parts that can be uploaded in parallel to three. In this case, replace `<maximum_number_parallel_uploads>` with **5**.

3. You specify the part size of your choice, and the object storage splits the object into parts and performs the upload of all parts automatically. You will see that the uploading object operation is 100% complete. When using the CLI, you do not have to perform a commit when the upload is complete.
4. From the **Main Menu**, select **Storage**. Under **Object Storage & Archive Storage**, click **Buckets**.
5. From the **Buckets** screen, click the bucket name **FRA-AA-LAB11-1-BKT-01-*xxx*** to view its details.
6. Under **Objects**, validate that the object **FRA-AA-LAB11-1-OBJ-01** is present.