Documention overview

In a provided solution (AzureBlobStorageLRS.sln) there is a single project **AzureBlobStorageLRS.csproj** which contains functions for reading and writing to LRS storage.

Functions are in folders *LRS Storage*.

Created functions are:

* **Reading blobs from LRS storage** – Function located in: *LRS Storage\ReadBlobFromLRS.cs*
* **Writing blobs to LRS storage** – Function located in: *LRS Storage\WriteBlobToLRS.cs*

Deployment steps

Steps to deploy are simple, where I set everything up from the beginning. As a transcript:

* Create a resource group in Azure
* Create LRS storage account in resource group
* Open LRS storage account and create a container named **samplecontainer**
* Create function app with .NET Core runtime located in Central US
* Create function app with .NET Core runtime located in East US2
* To deploy the code:
* Open project in Visual Studio and right click -> Publish
* When publishing please make sure to provide correct connection strings for LRS storage account. Connection strings can be found by:
* Open any storage account
* Then go to “**Access keys**” menu on the left
* And copy “**Connection string**”

Explanation of Read Blob functions

Code for reading from LRS. I have commented every single line, but general explanation is:

* Read parameter from query string “**blobName**”
* Retrieve connection string of storage account
* Then, create CloudStorageAccount instance from connection string
* Then, create CloudBlobClient from CloudStorageAccount instance. It is used to manipulate blobs
* Then, get a Container Reference to our “**samplecontainer**” container
* Then, get a blob reference to the blob which was provided in “**blobName”** query string
* And finally download a blob and return it from API

Explanation of Write blob functions

Code for writting blobs to LRS. I have commented every single line, but general explanation is:

* Retrieve body from HTTP request and deserialize it to **SaveBlobRequest** class. This class has two properties:
* **BlobContentBase64** – which is a base64 content of a file
* **BlobName** – which is a name to use when saving a blob
* Retrieve connection string of storage account
* Then, create CloudStorageAccount instance from connection string
* Then, create CloudBlobClient from CloudStorageAccount instance. It is used to manipulate blobs
* Then, get a Container Reference to our “**samplecontainer**” container
* Then, get a blob reference to the blob which was provided in “**saveBlobRequest.BlobName”** in body
* Since it’s base64, we need to convert it to byte[]
* And finally use *UploadFromStreamAsync* to upload blob content to the container

How to use API

The APIs are located, as their functions are called. Below you can find URLs and how to invoke each API.

Make sure to change “saivemu-demo-centralus-api” to how your function app will be called!!!

* [https://saivemu-demo-centralus-api.azurewebsites.net/ **HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/ReadBlobFromLRS"api/ReadBlobFromLRS**](https://saivemu-demo-centralus-api.azurewebsites.net/api/ReadBlobFromLRS)
* To invoke send a **GET** request and provide **blobName** query string
* **Example**: [https://saivemu-demo-centralus-api.azurewebsites.net/ HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/ReadBlobFromLRS?blobName=saivemu.json"api/ReadBlobFromLRS **HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/ReadBlobFromLRS?blobName=saivemu.json"?blobName=saivemu.json**](https://saivemu-demo-centralus-api.azurewebsites.net/api/ReadBlobFromLRS?blobName=saivemu.json)
* [https://saivemu-demo-centralus-api.azurewebsites.net/ **HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/WriteBlobToLRS" HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/WriteBlobToLRS" HYPERLINK "https://saivemu-demo-centralus-api.azurewebsites.net/api/WriteBlobToLRS"api/**](https://saivemu-demo-centralus-api.azurewebsites.net/api/WriteBlobToLRS)
* To invoke send a **POST** request to above URL and provide JSON body with blob content and name.
* **Example JSON:**

{

    "BlobContentBase64": "ew0KCSJDb250ZW50IjogIlRoaXMgaXMgYSBjb250ZW50IG9mIGEgZGVtbyBibG9iIiwNCgkiVXNlciI6ICJTYWkgVmVtdSINCn0=",

    "BlobName": "saivemu.json"

}