How to backup SQL Server databases to Microsoft Azure

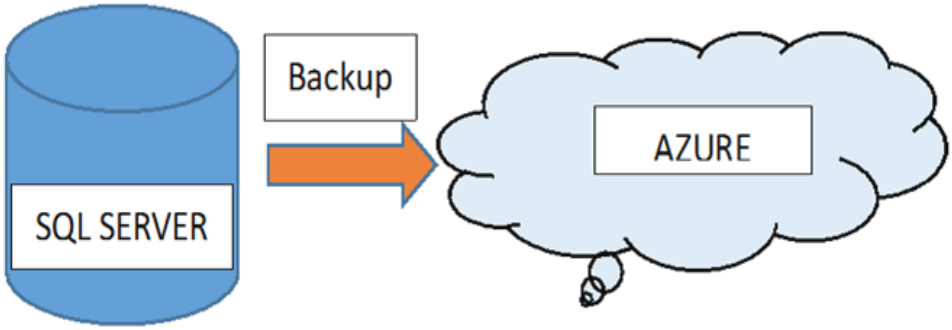
January 22, 2015 by Daniel Calbimonte

In the last chapter, we explained how to create a Microsoft Azure Account and how to have a Microsoft Azure Portal.

This time, we will show how to backup our SQL Server Databases to a Microsoft Azure. We are assuming that you already have an Azure account.

Introduction

Microsoft Azure stores your information with redundancy on the web. It is a safe and secure environment and simplifies your administrative tasks.



Getting Started

There are two main steps to backup your database in Microsoft Azure:

1. Create a Storage with a container in the Microsoft Azure portal.
2. Backup your local Database to that container (you will need a credential to connect to the Storage).

Create a Storage and a Container in Microsoft Azure

The first step to backup in Azure is to create a storage.

First, sign in to the Microsoft Azure Portal:

Click on the Storage link to create a new storage.

Figure 2. The storage in Azure

Create a new storage using the new link.

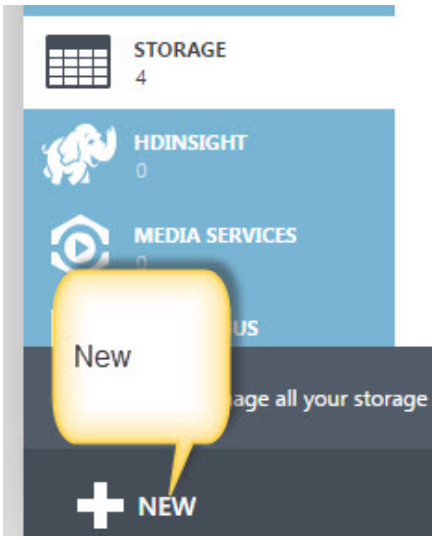


Figure 3. New Storage creation

Use the Quick create option to create the new storage.

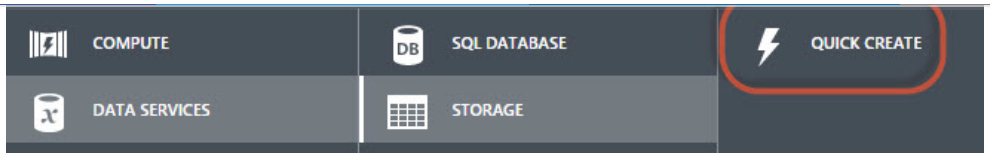


Figure 4. Quick storage creation

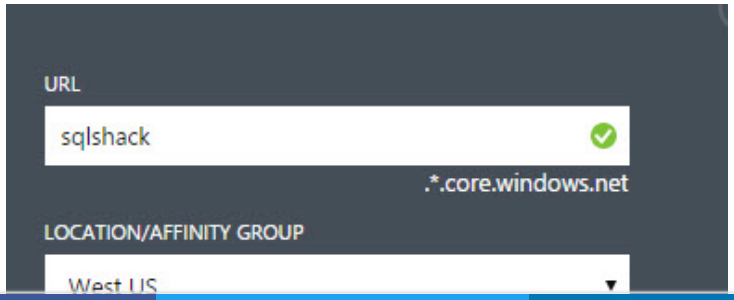
For the URL, you can use any name if it does not already exist.

Location/Affinity group, lets you select where you want to store the primary data. It is recommended to select a location closer to your current region. The options available when this article was created were:

- West US
- East US 2
- Central US
- South Central US
- West Europe
- East US
- Southeast Asia
- East Asia
- Japan West
- Japan East

The other options available are:

- Locally redundant storage stores and maintains three copies of your data in a single facility and a single region.
- Geo-Redundant is the default and recommended option. This option lets you create six replicas of your data 3 in your local region and three in other region far away from the other replica.
- Read access geo-redundant creates replicas in a primary region and secondary read-only replica in a second region. In case that the primary replica fails, the secondary replica can be used with read-only permissions.
- Zone-Redundant storage lets you store 2-3 replicas in the same region or two different regions.



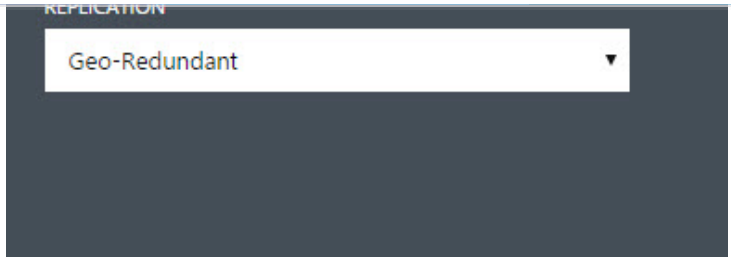


Figure 5. Storage options

If everything is OK, a new storage will be created. Click on the sqlshack link just created.

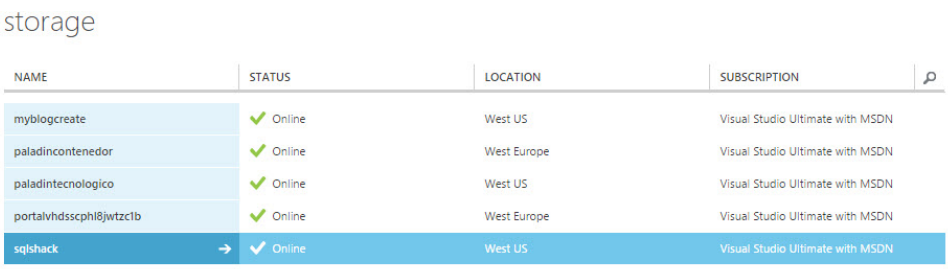


Figure 6. The sqlshack storage created.

Click the containers link.

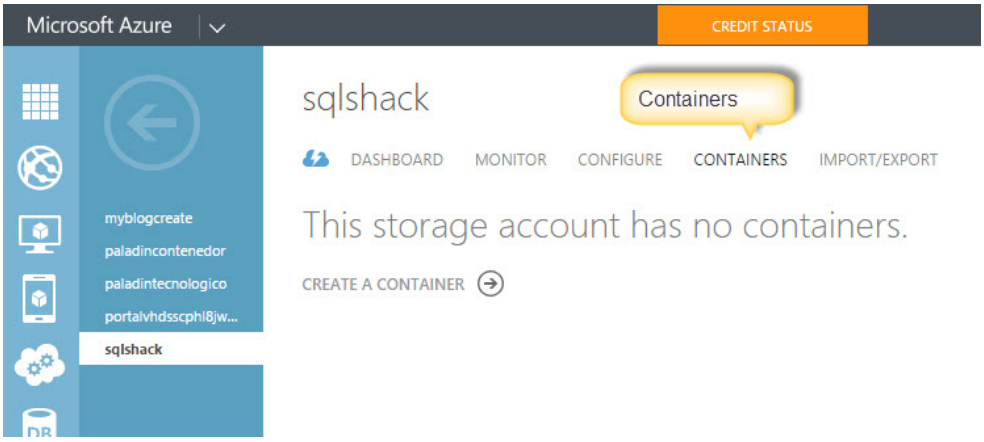


Figure 7. The containers

Click the Create a container option.

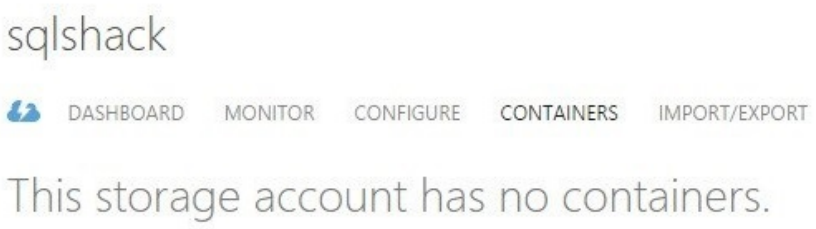


Figure 8. Creating containers

Add a name to the container.

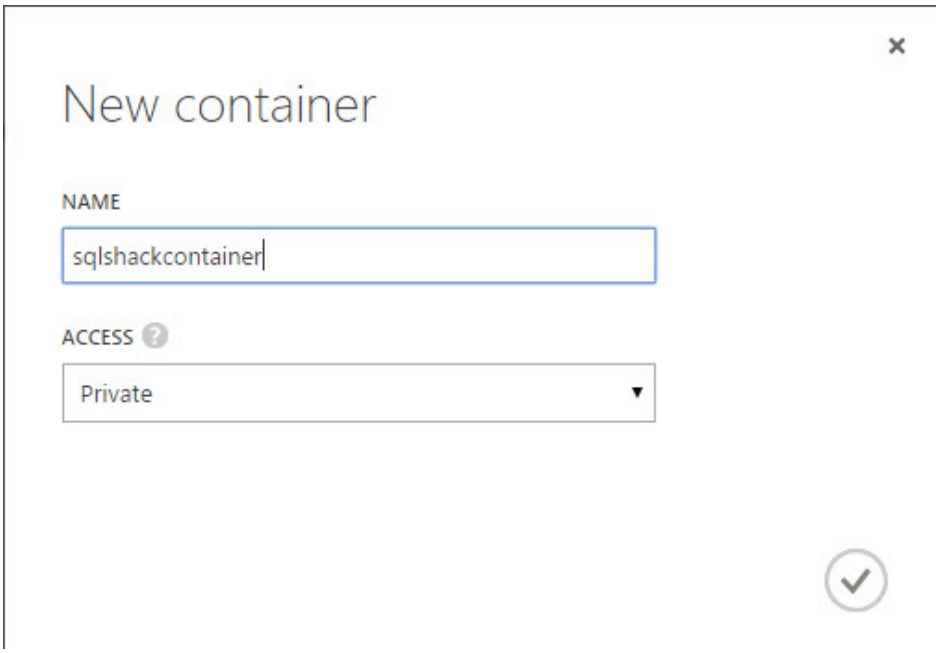


Figure 9. New container information

A new container will be created.

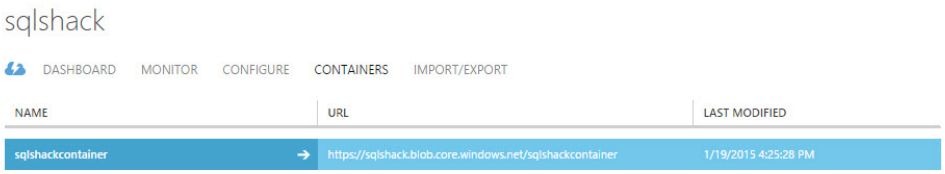
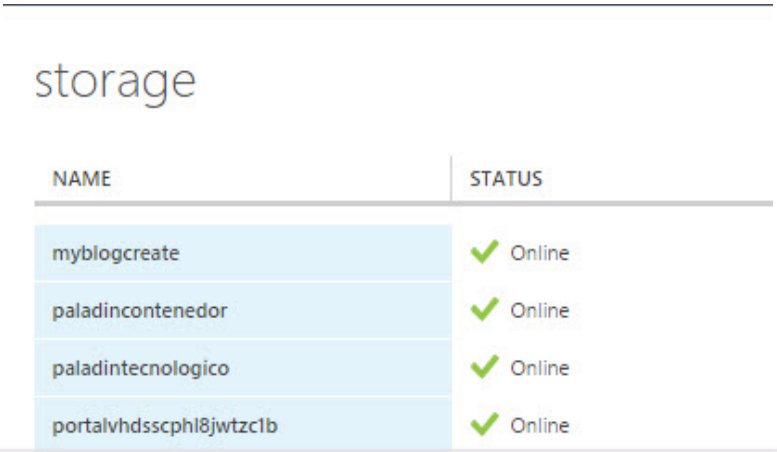


Figure 10. The container URL.

Return to the storage section and click the manage keys option.



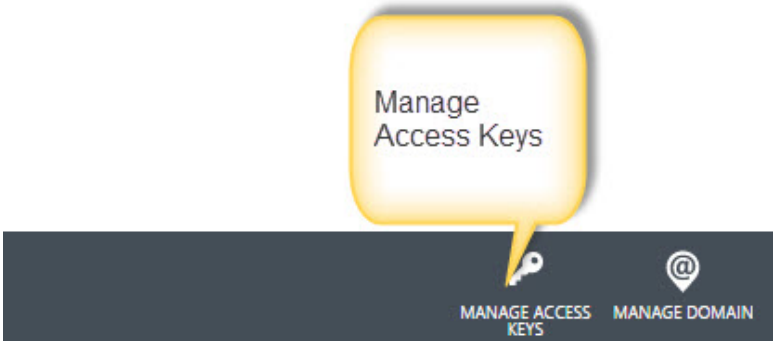


Figure 11. Manage keys option

The Manage Access Keys are used to connect to SQL Azure. The use will be explained later.

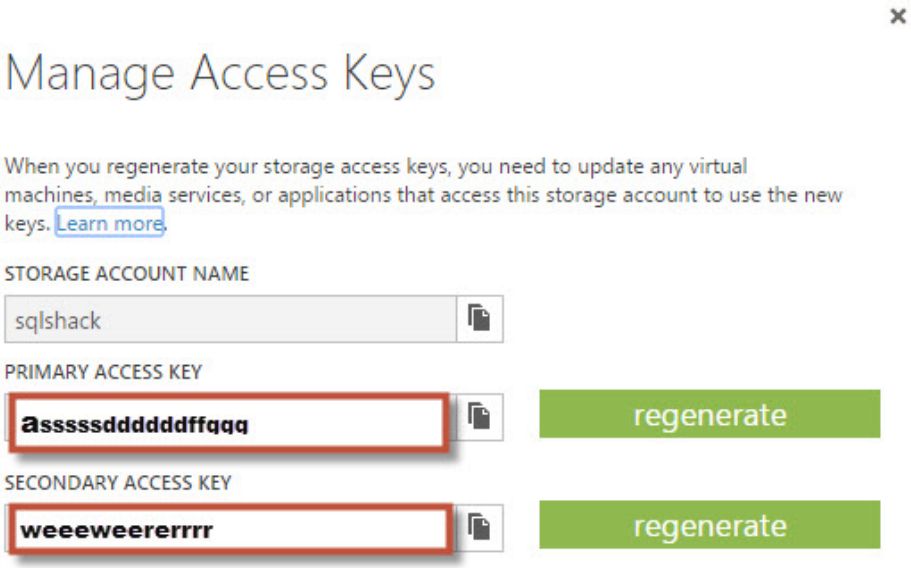
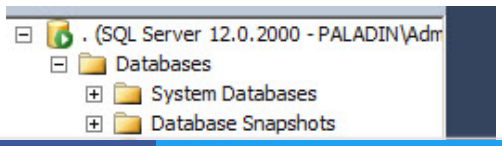


Figure 12 Azure Storage Access keys

SQL Server Backup in SSMS

We will create a Credential first to connect to Azure.



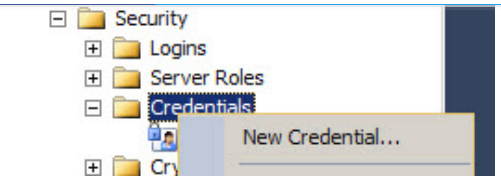


Figure 13 New Credential

The identity should be the storage name used in figure 5, the Password and Confirm password are the primary keys used in figure 12. Use the primary key as a password and in the confirm password textbox.

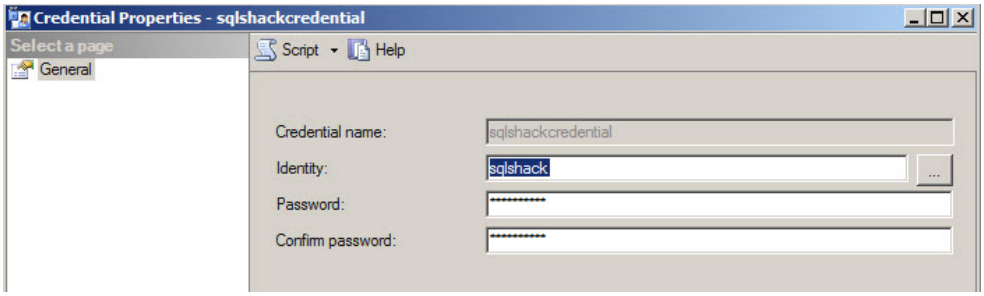


Figure 14 Credential information

If you prefer you prefer the T-SQL, you can use the following sentences:

```
CREATE CREDENTIAL [sqlshackcredential]
WITH IDENTITY = N'sqlshack',
SECRET = N'assssssdddddddffqqq'
GO
```

Now, backup a local database.

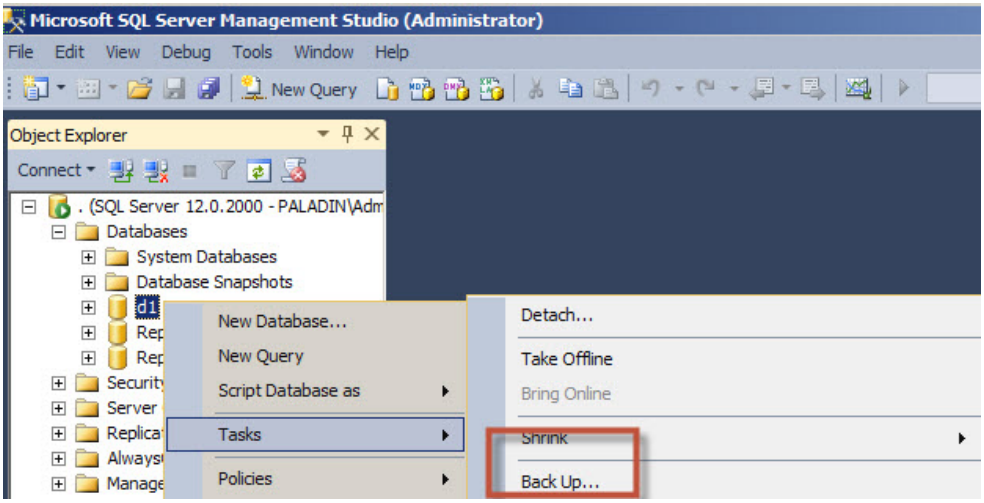


Figure 15 Back Up Database

In the Back up to option, select URL. In file name, you can write any name or keep