

Source: C# Corner (www.c-sharpcorner.com)

PRINT

Article

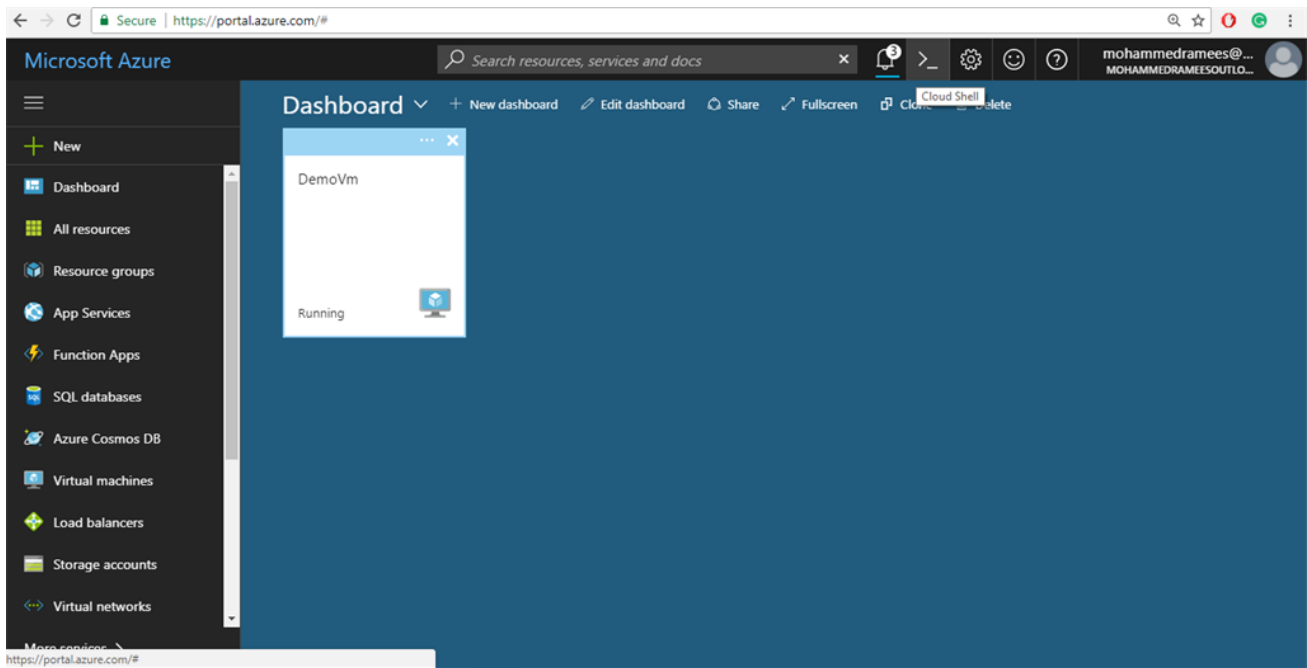


Deploying A Virtual Machine Using Azure CLI 2.0

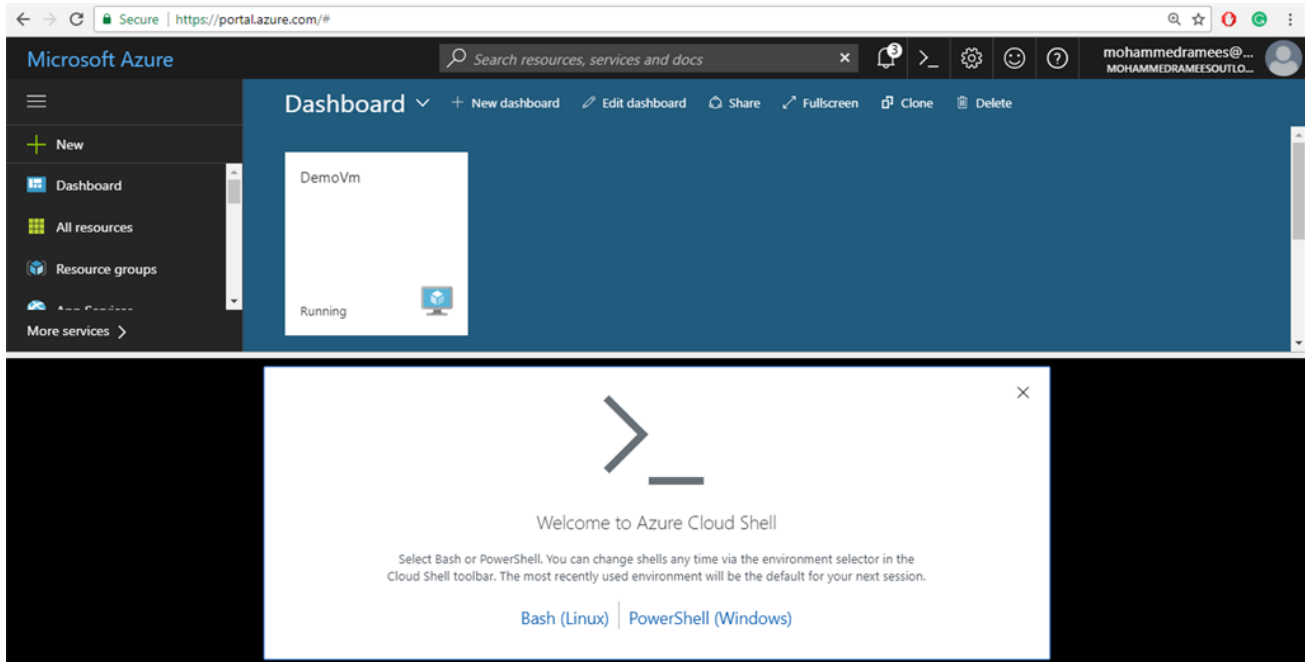
By **Ramees** on Oct 11 2017

The Azure CLI 2.0 is Azure's new command line experience for managing Azure resources. It can be either used in the browser itself with Azure Cloud Shell or you can install it on macOS, Linux, and Windows and run it from the command line. It is optimized for managing and administering Azure resources from the command line, and for building automation scripts that work against the Azure Resource Manager.

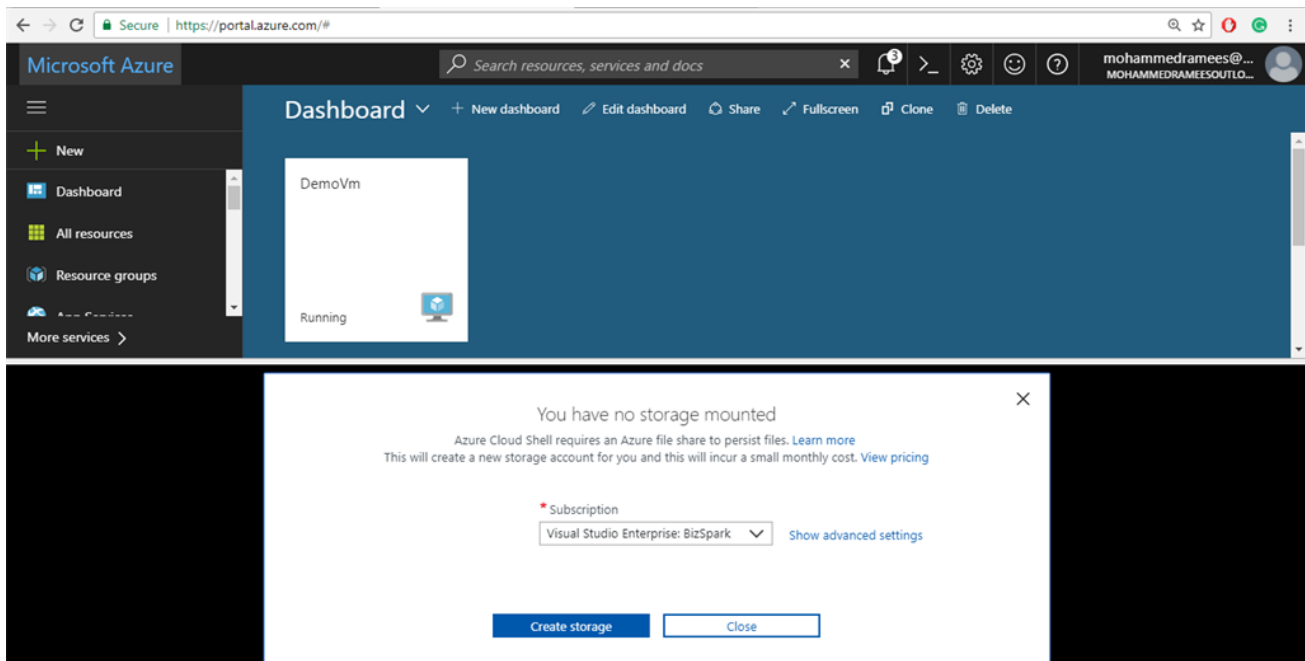
In this article, I will show you how to create a Virtual Machine using Azure CLI. You can launch the Cloud Shell by clicking the icon on the top of the Azure portal.



On launching for the first time, you will get a window at the bottom to select the environment. Here, I am selecting Bash for this demo.



Now, it will prompt for creating a storage account to persist your files from Shell session.



So, what happens here is like when you spin up a Cloud Shell in the background, Microsoft is going to stand up or initiate a container for you and you're going to be able to interact with that container and it's going to have the CLI installed in it. Clicking on "Create Storage" button will build a resource group with the storage account inside of it, and then, it'll launch a container for me. After initializing, you are ready to go.

```
Bash ▾ | 🔌 ? ⚙️
Your cloud drive has been created in:

Subscription Id: a9c1a839-5405-4732-a409-9186fb84c48e
Resource group: cloud-shell-storage-centralindia
Storage account: csga9c1a8395405x4732xa40
File share:      cs-mohammedramees-outlook-in-1003bffd4deb151

Initializing your account for Cloud Shell...\
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell (Preview)

Type "az" to use Azure CLI 2.0
Type "help" to learn about Cloud Shell

mohammed@Azure:~$
```

CLI works in a way that you have to start with an az command followed by subcommands. An `az --help` command will help you to get a list of commands possible, the help command can also be used with subcommands also. For example, if we want subcommands of group section, you can have an `az group --help` command.

Let us create a resource group first. The syntax is as follows.

`az group create -n ResourceGroupName -l Location`

So here, I want to create a Resource Group at South East Asia.

```
Bash ▾ | 🔌 ? ⚙️
mohammed@Azure:~$ az group create -n CLIResourceGroup -l southeastasia
{
  "id": "/subscriptions/a9c1a839-5405-4732-a409-9186fb84c48e/resourceGroups/CLIResourceGroup",
  "location": "southeastasia",
  "managedBy": null,
  "name": "CLIResourceGroup",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null
}
mohammed@Azure:~$
```

This will give the result for your action in JSON format and you can check the resource group from the portal.

The screenshot shows the Microsoft Azure portal interface. The left sidebar contains navigation links: New, Dashboard, All resources, Resource groups, App Services, Function Apps, SQL databases, Azure Cosmos DB, Virtual machines, Load balancers, Storage accounts, and Virtual networks. The main content area is titled 'Resource groups' and shows a list of resource groups under the subscription 'Visual Studio Enterprise: BizSpark'. The table lists four items:

NAME	SUBSCRIPTION	LOCATION
CLIResourceGroup	Visual Studio Enterprise: BizSpark	Southeast Asia
cloud-shell-storage-centralindia	Visual Studio Enterprise: BizSpark	Central India
DemoVM	Visual Studio Enterprise: BizSpark	Southeast Asia
MyStorage	Visual Studio Enterprise: BizSpark	Southeast Asia

Now, we have to add resources to this group that is a Virtual Machine. For this demo, I am using a Windows Server 2016 Data Center-based VM using the `az VM create` command and add it to the same "CLIResourceGroup" resource group that we created before. We are going to add a no-wait argument as it will asynchronously create the virtual machine. Else, it will kind of tie up my prompt and it'll wait a couple of minutes while it's building the VM before I can continue working. You will be prompted for giving a password. Don't get worried if what you are typing is not getting reflected there. Just type your password.

```
Bash
mohammed@Azure:~$ az vm create -n CLIDemoVM -g CLIResourceGroup --image Win2016Datacenter --size Standard_A0 --no-wait
Admin Password:
Confirm Admin Password:
mohammed@Azure:~$
```

Now, if you check the resource group in the portal, you can see the new VM is being deployed.

The screenshot shows the Microsoft Azure portal interface for the 'CLIResourceGroup' resource group. The left sidebar is the same as the previous screenshot. The main content area shows the 'Overview' tab for the resource group. It displays the subscription name 'Visual Studio Enterprise: BizSpark' and the subscription ID 'a9c1a839-5405-4732-a409-9186fb84c48e'. Below this, there is a table listing the resources in the group:

NAME	TYPE	LOCATION
CLIDemoVM	Virtual machine	Southeast Asia
CLIDemoVM_OsDisk_1_ea65f13e4b134bcb102ee1...	Disk	Southeast Asia
CLIDemoVMNSG	Network security group	Southeast Asia
CLIDemoVMPublicIP	Public IP address	Southeast Asia
CLIDemoVMVMNIC	Network interface	Southeast Asia
CLIDemoVMVNET	Virtual network	Southeast Asia

Thank you for using C# Corner