

AZURE LAB 9 (CUSTOM SCRIPT EXTENSIONS)

(FOR LINUX VM)

So now in this Lab, I want to showcase an example when it comes onto custom script extensions. In this example, you're going to install a web server role that is Internet information services on a Linux Server.

The lab is going to be same as the last in which you created a windows virtual machine. In this lab you are going to understand how things work for a Linux based virtual machine.

So, you are going to use a two-line code file for this lab.

 You can get the file from GitHub, or you can convert it into a file on your own, the code that is going to be used in it is.

```
(apt-get update -y && apt-get upgrade -y  
apt-get install -y nginx)
```

You can use VS code editor for this code to convert it into a file.

 TO BEGIN WITH THE LAB:

STEP 1: CREATE A STORAGE ACCOUNT AND UPLOAD FILE

1. So, from the previous lab you might have a storage account.
2. Use that account to create a new container and store that file from your system to that container.



New container

X

Name *

linuxscript ✓

Anonymous access level ⓘ

Private (no anonymous access) ▾

i The access level is set to private because anonymous access is disabled on this storage account.

Advanced

Containers				
Name	Last modified	Anonymous access level	Lease state	...
<input type="checkbox"/> \$logs	12/26/2023, 1:30:06 PM	Private	Available	...
<input type="checkbox"/> linuxscript	12/26/2023, 2:30:47 PM	Private	Available	...
<input type="checkbox"/> scripts	12/26/2023, 1:34:56 PM	Private	Available	...

Blobs							
Authentication method: Access key (Switch to Microsoft Entra user account)							
Location: linuxscript							
Search blobs by prefix (case-sensitive)							
<input type="checkbox"/> install_web.sh	Modified	Access tier	Archive status	Blob type	Size	Lease state	...
	12/26/2023, 2:31:29 PM	Hot (Inferred)		Block blob	65 B	Available	...

STEP 2: CREATE A VIRTUAL MACHINE

1. Now create a Linux virtual machine.
2. Go to create resources, select virtual machine and create it.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Free Trial



Resource group * ⓘ

app-grp



[Create new](#)

Instance details

Virtual machine name * ⓘ

linuxvm



Region * ⓘ

(Asia Pacific) Central India



Availability options ⓘ

No infrastructure redundancy required



Security type ⓘ

Standard



Image * ⓘ

Ubuntu Server 22.04 LTS - x64 Gen2 (free services eligible)



[See all images](#) | [Configure VM generation](#)

This image is compatible with additional security features. [Click here to swap to the Trusted launch security type](#).

VM architecture ⓘ

Arm64

x64

Run with Azure Spot discount ⓘ

Size * ⓘ

Standard_D2s_v3 - 2 vcpus, 8 GiB memory (₹6,019.67/month)



[See all sizes](#)

Enable Hibernation (preview) ⓘ

To enable Hibernation, you must register your subscription. [Learn more](#)

Administrator account

Authentication type ⓘ

SSH public key

Password

Username * ⓘ

linuxusr



Password * ⓘ



Confirm password * ⓘ



Inbound port rules

Select which virtual machine network ports are accessible from the public internet. You can specify more limited or granular network access on the Networking tab.

Public inbound ports * ⓘ

- None
 Allow selected ports

Select inbound ports *

HTTP (80), SSH (22)



i All traffic from the internet will be blocked by default. You will be able to change inbound port rules in the VM > Networking page.

Review + create

< Previous

Next : Disks >

3. Just keep one thing in mind while creating your virtual machine, select HTTP (80) as your inbound port, because it will enable your virtual machine to connect with the outside world.
4. Now you need to move directly to the Advanced section by keep rest of the things to default.

Basics Disks Networking Management Monitoring **Advanced** Tags Review + create

Add additional configuration, agents, scripts or applications via virtual machine extensions or cloud-init.

Extensions

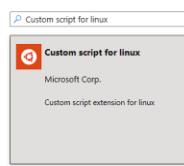
Extensions provide post-deployment configuration and automation.

Extensions ⓘ

Select an extension to install

5. In the advanced section click on Select an extension to install. This option will enable you to select your stored file from the storage and it will get installed while the machine will be generating.
6. So, there first you need to search custom script extension, then select it, and click on next.
7. Now you need to browse your file. For that click on browse.
8. Select your account.
9. Then select your container, in last select your file.

Install an Extension ...



Configure Custom script for linux Extension

Create

Script files

Command *

sh script.sh

10. Here you can see the command name, you need to change this name with your file name once you have uploaded your file. If you will not do this, you might get an error in the time of deployment.

Storage accounts

Storage account

Name	Type	Resource Group	Location
appstorage2711	Standard-LRS	app-grp	Central India

Containers

Container

Name	Last modified	Anonymous access level	Lease state	...
\$logs	12/26/2023, 1:30:06 PM	Private	Available	...
linuxscript	12/26/2023, 2:30:47 PM	Private	Available	...
scripts	12/26/2023, 1:34:56 PM	Private	Available	...

linuxscript

Authentication method: Access key (Switch to Microsoft Entra user account)

Location: linuscript

Search blobs by prefix (case-sensitive)

Show deleted blobs

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
install_web.sh	12/26/2023, 2:31:29 PM	Hot (Inferred)		Block blob	65 B	Available

Script files "install_web.sh"

Command *

sh install_web.sh



11. Here you can see I've changed the command with file name.

12. Once your file is selected click on create.

Basics Disks Networking Management Monitoring Advanced Tags Review + create

Add additional configuration, agents, scripts or applications via virtual machine extensions or cloud-init.

Extensions

Extensions provide post-deployment configuration and automation.

Extensions ⓘ

 Custom script for linux
Microsoft Corp.

Select an extension to install

13. Now jump to review page and create your virtual machine.

14. It will take around 4-5 minutes this time to create the machine.

✓ Your deployment is complete

 Deployment name: CreateVm-canonical.0001-com-ubuntu-server-j... Start time: 12/26/2023, 2:56:53 PM
Subscription: Free Trial Correlation ID: 79d39454-c35e-4279-a49f-acc25daaabcf 

✗ Deployment details

✗ Next steps

Setup auto-shutdown Recommended

Monitor VM health, performance and network dependencies Recommended

Run a script inside the virtual machine Recommended

[Go to resource](#)

[Create another VM](#)

15. Once the deployment is complete go to resource page.

16. On the resource page copy Public IP address and paste it in a new tab.

17. You'll see that you web server is successfully installed on the virtual machine.

