How to Create an Image from an ISO in mCloud

Vincent (Vinnie) Curle - 2025-03-14 - mCloud

Cloud images are by far the preferred way to deploy VM Instances in mCloud, but at times the need to install from ISO may arise. Please keep in mind that this is an advanced process. This guide will attempt to detail the steps required to create and configure one in your mCloud Dashboard.

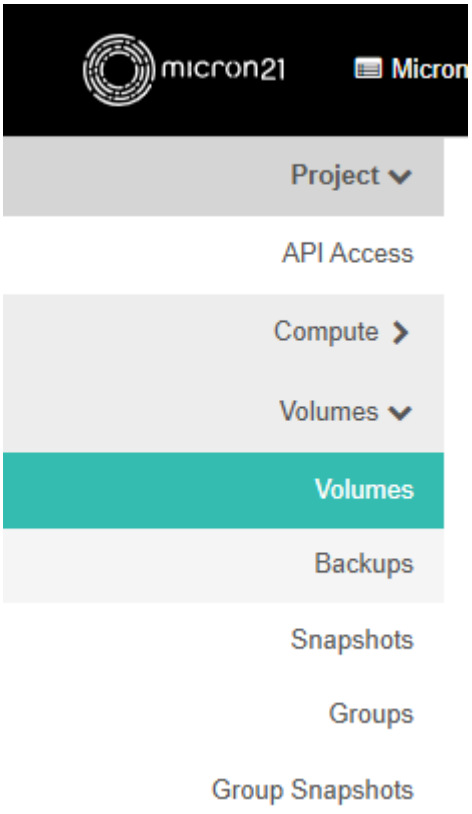
Please Note: instances generated from images made in this manner will need to have things like IP address, disk resizing, hostnames and SSH keys manually applied, and will most likely ignore cloud-init as well.

Prerequisites

You will need to ensure that the ISO exists in your mCloud Dashboard. If you need a new ISO please upload it following the details in the guide linked below:
https://support.micron21.com/kb/articles/359-how-to-upload-an-iso-to-the-mcloud-dashboard

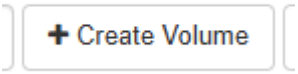
Method:

1. Log into mCloud at https://mcloud.micron21.com/
2. Navigate to Project > Volumes > Volumes



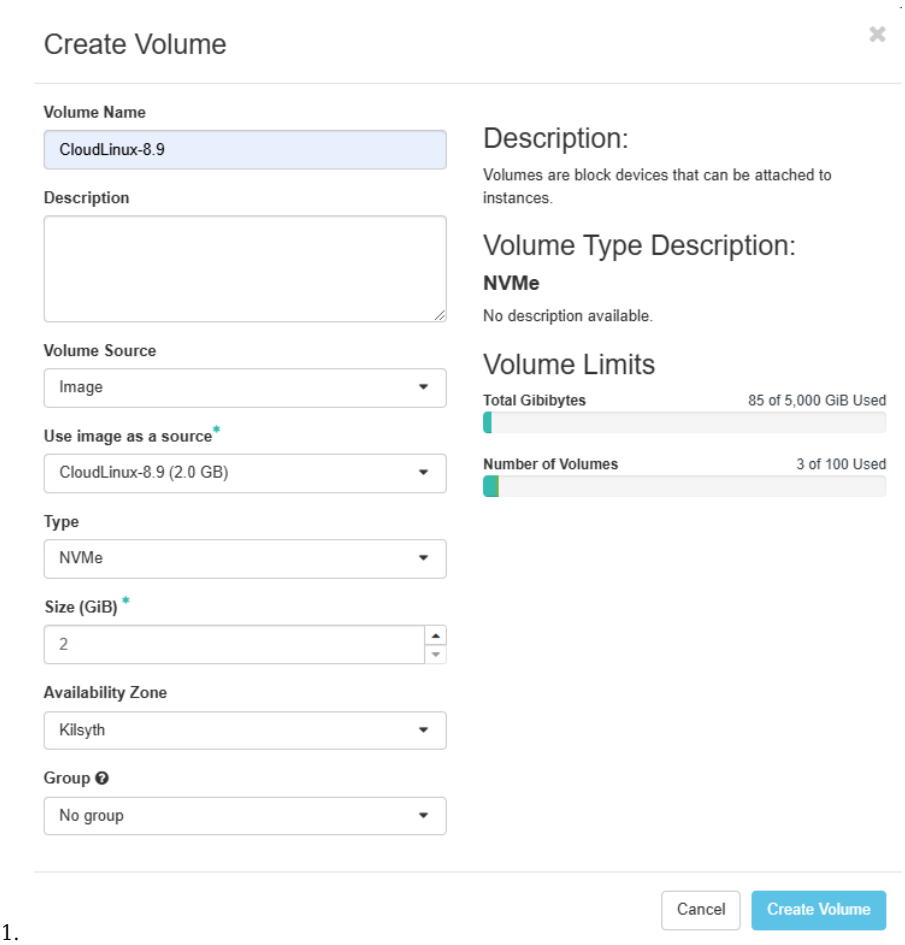
1.

3. Click "+Create Volume"

1. 

4. On this page set the following details as required:

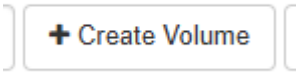
    1. Volume Name: Enter the name you'd like set for the ISO,
    2. Description: Enter the desired Description as required, or leave this field blank
    3. Volume Source: From the dropdown, select 'Image'
    4. Use Image as Source: Set the appropriate source image for the ISO.
    5. Type: Set the volume type you wish to use, leave the size as the default set by the ISO,
    6. Availability Zone: Set the relevant availability zone from the dropdown. Usually, this will be "Kilsyth".

    1. 

5. click "Create Volume"

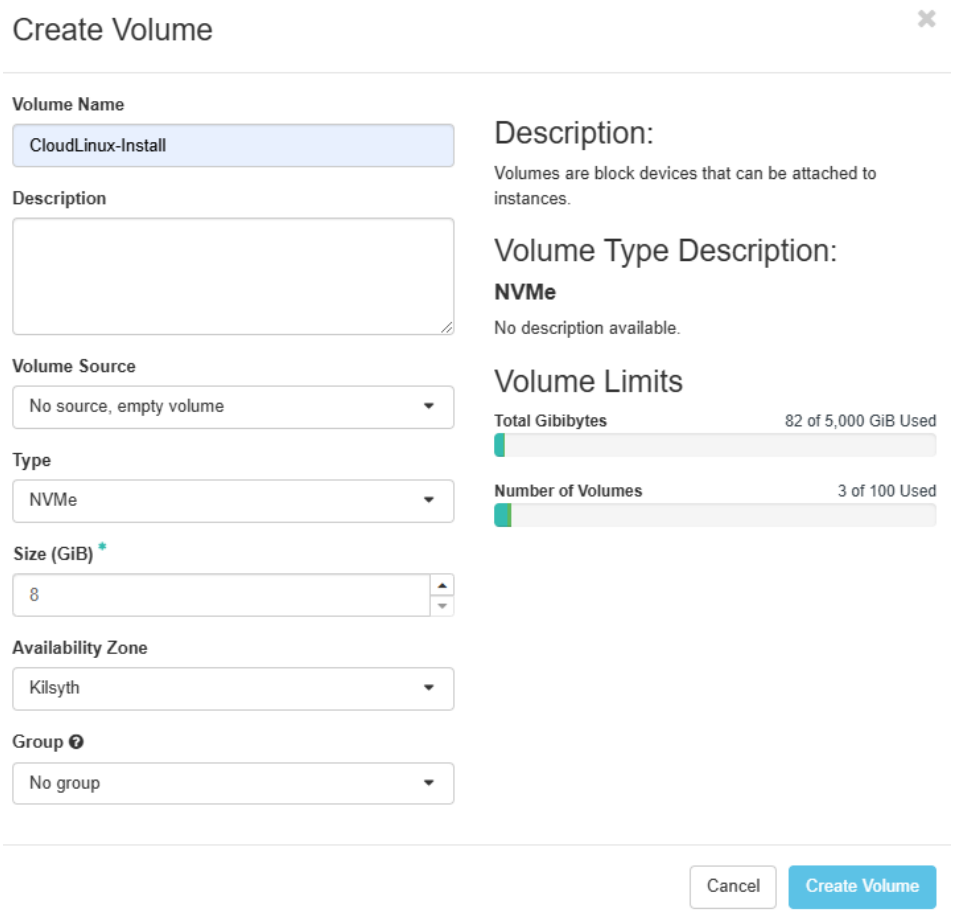
6. Next, we will create a volume for the OS to be installed onto.

7. Click "+ Create Volume" again

    1. 

8. Leave the volume source blank, as this will be an empty volume, then set the same details as above. Click "Create Volume".

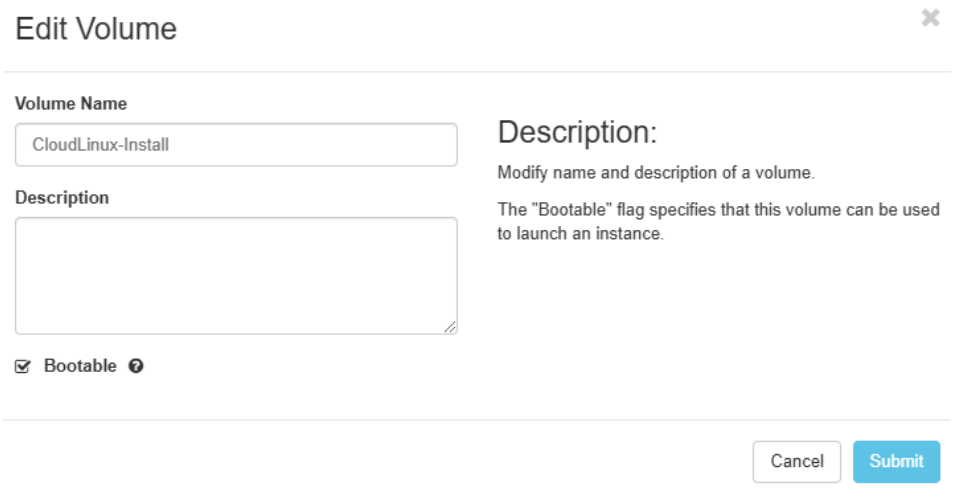
    1. Note; you can keep the size for this one small as this is an interim step and will be removed later in the article

    2. 

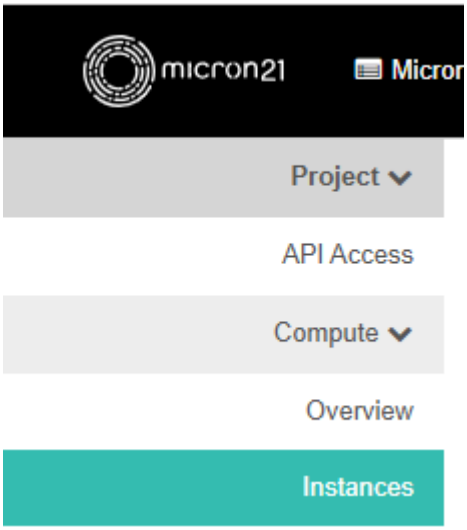
9. click "Create Volume"

10. In the list of volumes, Click "Edit Volume" on the new blank volume

11. On the edit Volume page, tick the ‘Bootable’ tick box, then click Submit

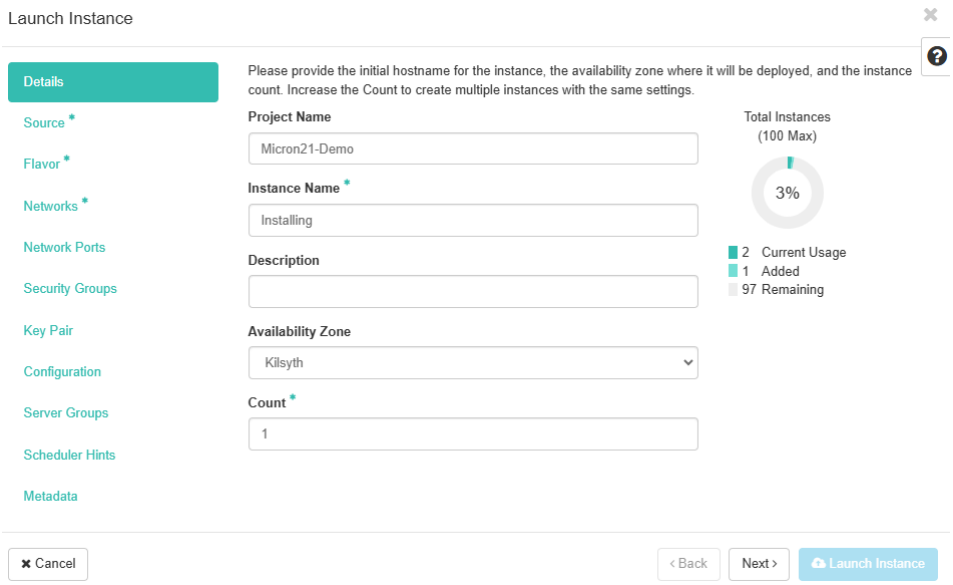
1. 

12. Now we'll be creating a temporary instance to install the Operating System. - Next, Navigate to Project > Compute > Instances

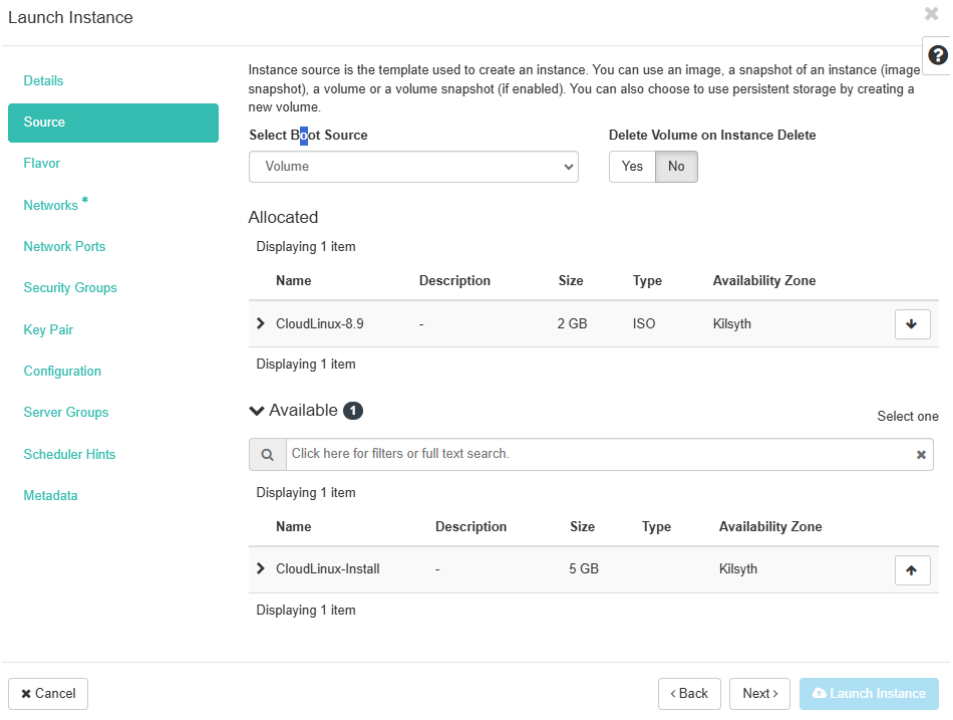
1. 

13. Click "Launch Instance"

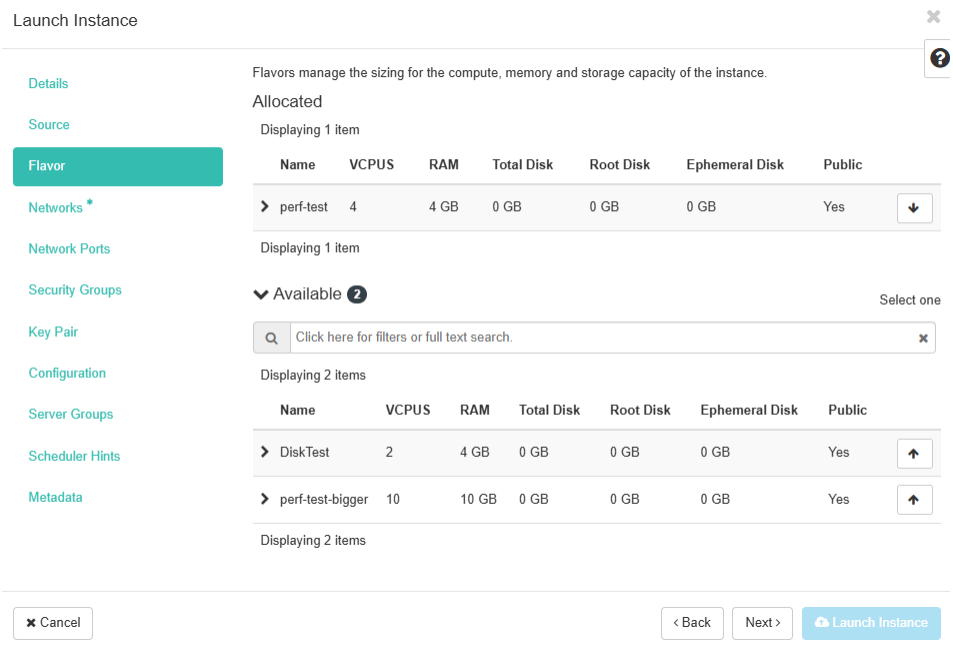
14. Enter a temporary name, and select the Availability zone selected in steps 4 and 6, and click Next

1. 

15. For Boot Source, select "Volume" then select the ISO volume we created earlier. Leave the empty volume unselected for now. And ensure the option to “0delete volume on instance delete” is not selected. Then Click Next

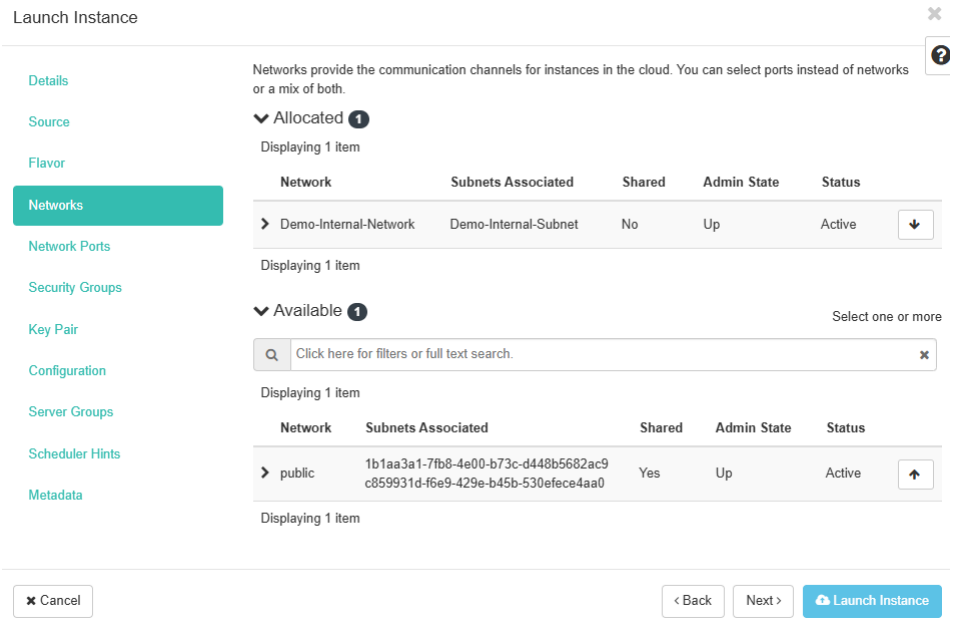
1. 

16. On the Flavor page, select the desired Resource limits as required.



1.

17. Select the desired network.

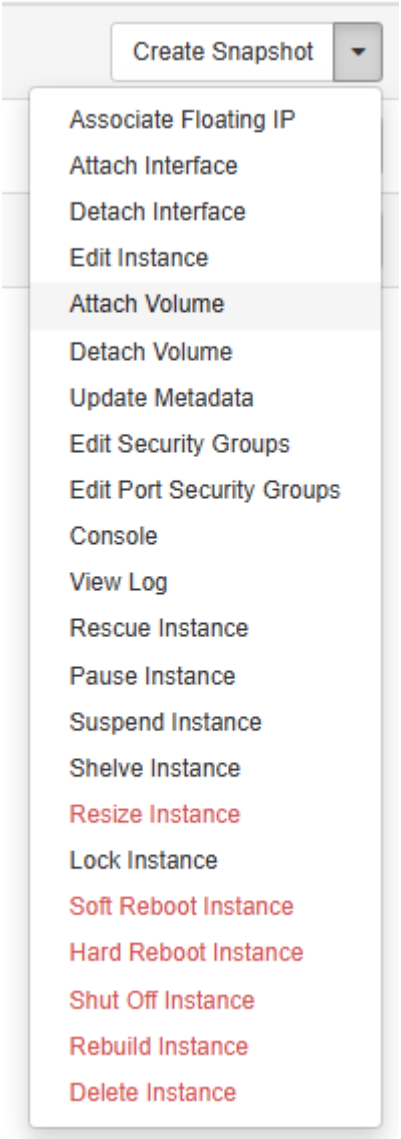


1.

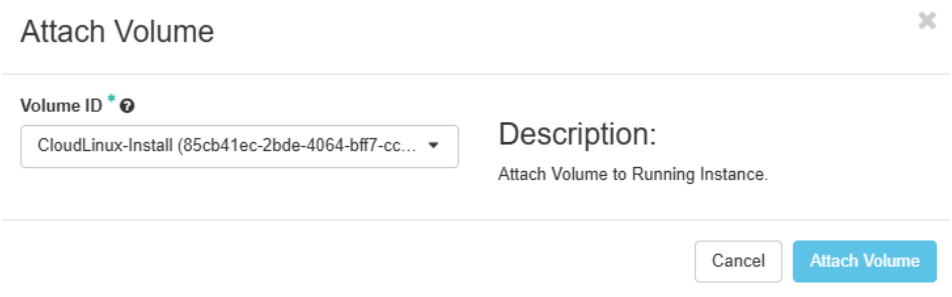
2. Note: Depending on the ISO you are installing, this may need to match the final network you'd like associated with VMs created using the new Image

18. Click "Launch Instance" and allow some time for the instance to be created

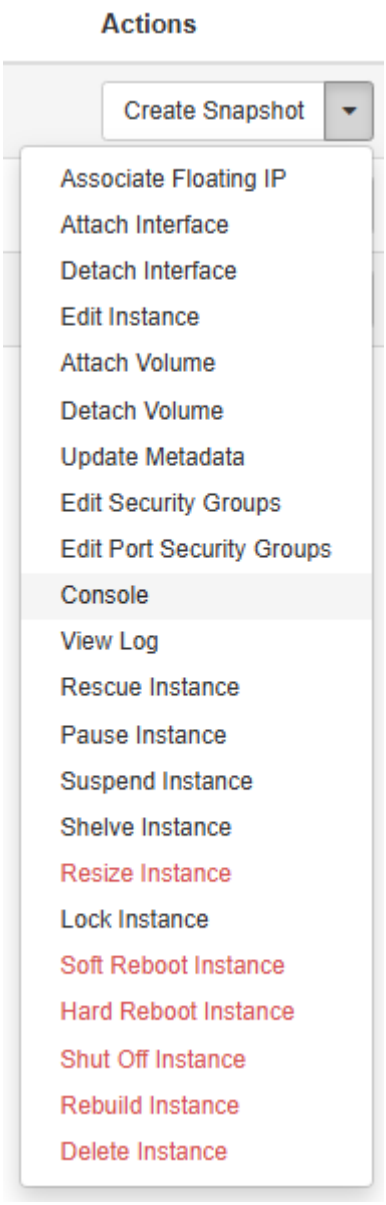
19. Once the Instance has finished being built, select the drop-down menu on the right and select "Attach Volume"

1. 

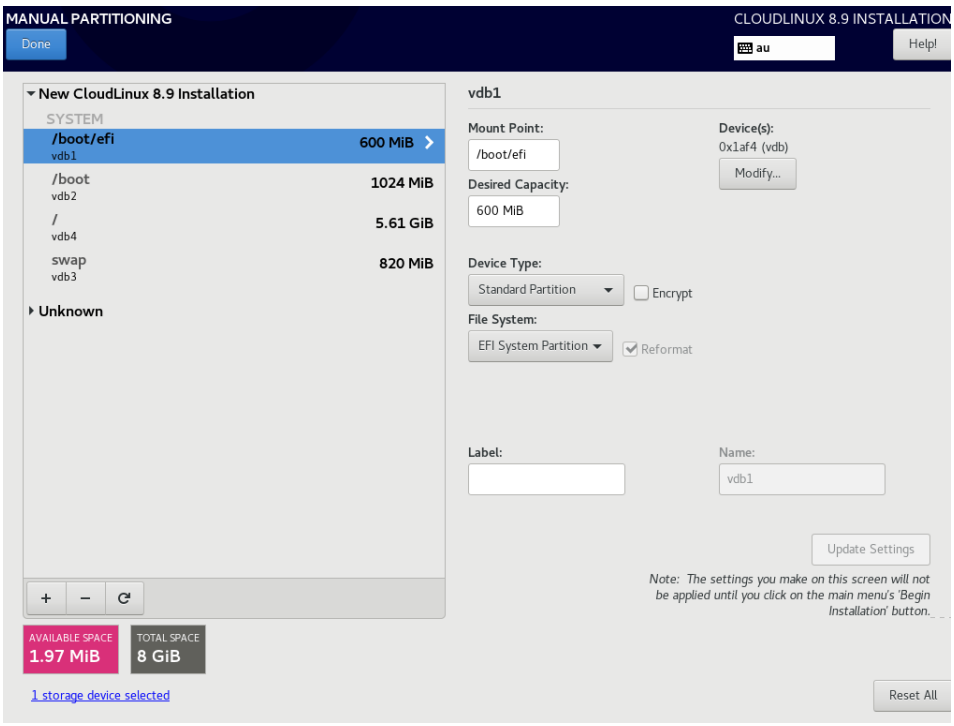
20. Select the empty volume you created previously, then click "Attach Volume"

1. 

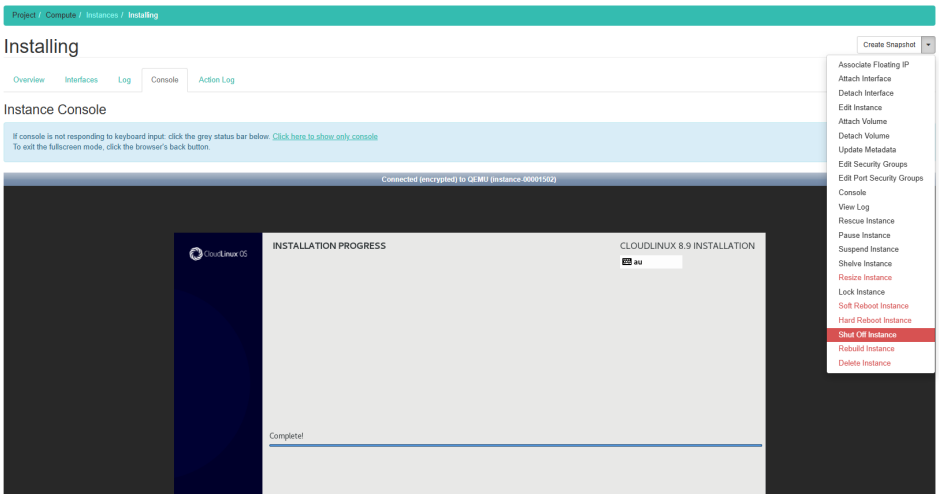
21. Open the drop-down menu again, and this time select "Console"

1. 

22. Inside the Console, Follow the standard installation method for your Operating system. Some OS may require that you manually configure partitions. In these cases, you will need to refer to the OS documentation for details on how to complete the configuration.

1. 

23. Once you have completed the installation, shut off the VM instance from the dropdown menu at the top right.

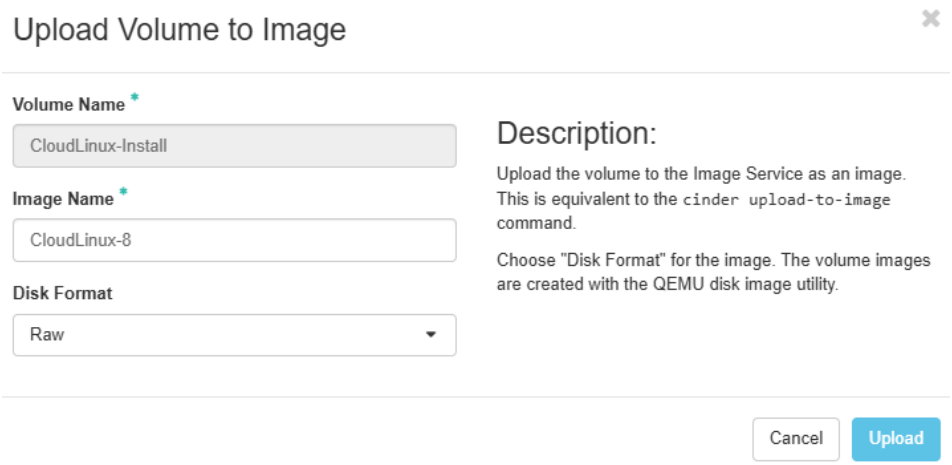
1. 

24. Next, Navigate back to Project > Compute > Instances

25. Delete the temporary instance created earlier in the guide (From step 11)

26. Navigate to Project > Volumes > Volumes. Click on the previously blank volume you created (Now with an OS installed on it)

27. On the install volume page, open the drop-down menu and select "Upload to Image". Give it the desired name, and leave the disk format as "Raw"

1. 

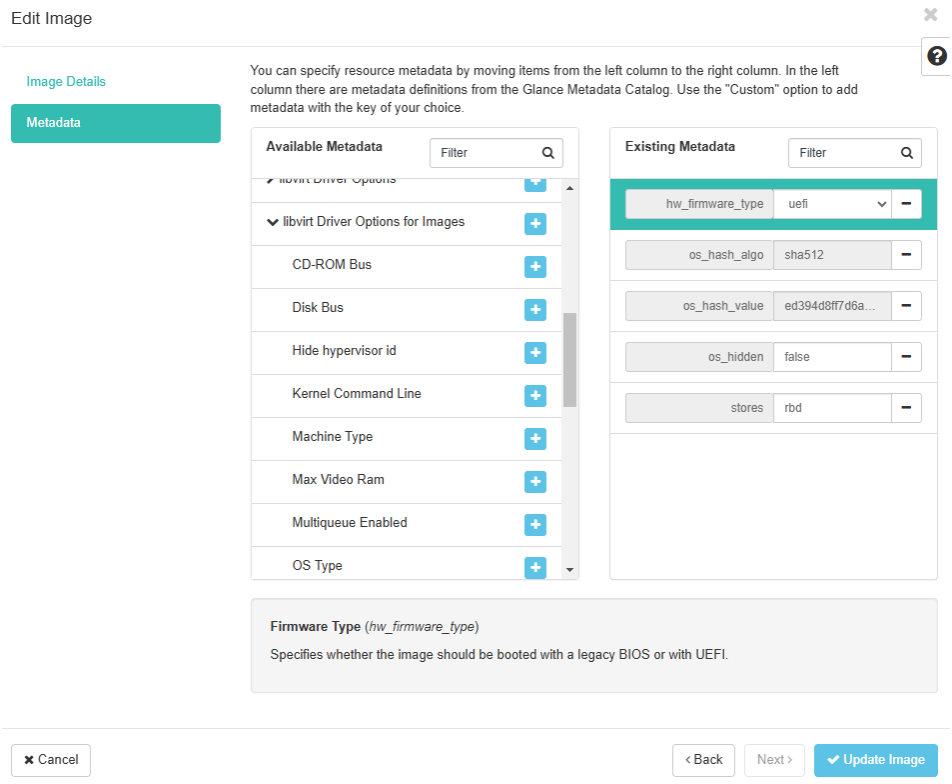
28. Wait for the upload to complete, then navigate to Compute > Images

29. Locate the Image you just created and from its drop-down menu select ‘Edit Image’

30. Set Description and Visibility as required, then click Next

31. On the left, unbranch "libvirt Driver Options for Images" and click the + on Firmware Type. On the right-hand side, set the firmware type to match what you set when you uploaded the ISO. Click Update Image

    1. Note: if you didn't set this when you uploaded the ISO, you shouldn't need to set it here. If this setting is unset, the system will assume BIOS mode

    2. 

32. You can now use this image to deploy instances as described in our "How to Create a VM Instance from Image":

https://support.micron21.com/kb/articles/358-how-to-create-a-vm-instance-from-an-image-in-mcloud

1. Note: Unfortunately instances generated from images made in this manner will need to have things like IP address, disk resizing, hostnames and SSH keys manually applied, and will most likely ignore cloud-init as well.