












# Managing Virtual Machines

In your *Deployments* tab, you can see a list of your requests outcome.  
For example:

 <b>Cluster Debian 9</b> <small>No description</small> Owner: Claudio Reddelli Business group: SettoreServiziRete	5 Resources  008  009 <a href="#">3 MORE</a>	Expense (Month to date...) ▶ On ▶ On	Created 1 month ago 10.99  10.99 	Expiring in 2 years	<a href="#">ACTIONS</a>
 <b>Windows 10-94113878</b> <small>Windows 10 N Enterprise</small> Owner: Claudio Reddelli Business group: SettoreServiziRete	2 Resources  002  CustomersVMs-c909122a...	Expense (Month to date...) ▶ On	Created 1 month ago 10.99 	Expiring in 1 month	<a href="#">ACTIONS</a>
 <b>Ubuntu 18-11444674</b> <small>Ubuntu 18.04 LTS x64</small> Owner: Claudio Reddelli Business group: SettoreServiziRete	#1631 - Shutdown 3C76E1BD001 - <b>Failed</b> <div><div></div></div> <small>Cannot complete operation because VMware Tools is not running in this virtual machine.</small>				<a href="#">ACTIONS</a> 27 days since submitted
 <b>Abilita/Disabilita utente VPN</b> <small>No description</small> Owner: Claudio Reddelli Business group: SettoreServiziRete	#1390 - Workflow Execution Abilita/Disabilita utente VPN - <b>Successful</b> <div><div></div></div> <small>The request was successfully completed</small>				<a href="#">ACTIONS</a> 1 month since submitted

Here, you can see some cases:

- A working Linux Debian 9 deployment
- A working Microsoft Windows 10 deployment
- A failed shutdown action on a virtual machine in a Linux Ubuntu 18.04 deployment
- A successful enable/disable on a VPN user of your own business group

In this document we will focus on virtual machines deployments.

## Virtual machines deployments

You may notice that the deployment name is a link. If you move your mouse over it, a pencil icon will appear next to it on the right hand side. Clicking that icon enables you to change both the name and description of your deployment. You may want to do it to give an easy to recognize label to a group of virtual machines.

If you click directly on the deployment name, you'll be transferred to it's details. We'll cover it later.

At the rightmost end of the single deployment box there is a link, labeled "*Actions*".

You can click that link and see (and choose) all actions you may execute on your deployment.

- Change Lease: you change the lease time of your deployment. Stretch it or shorten it.
- Change Owner: you can transfer the ownership of this deployment to any other user in your business group. You may want to build a deployment with your own specifics and transfer it to some collaborator who will manage it. Once you change ownership on a deployment you will not see it anymore. Only the new owner will see it.
- Change Security: you can manage some security settings. Unused at the moment.

- **Destroy:** utterly destroys the deployment and all its components.
- **Expire:** zeroes the left lease time. Your deployment becomes in a “expired” state and virtual machines cannot be powered on. VPN still works. In order to power virtual machines on you must set a lease time in the future.
- **Scale In:** when you have deployed many virtual machines, you can lower their number with this action. Beware: you cannot choose which ones will be destroyed. If you want control over it, you should delete your virtual machines one by one.
- **Scale Out:** lets you to deploy at once other virtual machines like the one you instantiated when created this deployment. New virtual machines will have all the same original configuration, even if you modified the existing ones later.
- **View Details:** it's the same as clicking on the deployment name. It transfers you to the deployments details page.

## Deployment details

Once you click on a deployment name, you get to its details page.

[Back](#)

Cluster Debian 9

*No description*

Owner	Claudio Redaelli	Expense (Month to date)	€111.64
Provisioned on	May 23, 2020 4:24 PM	Lease duration	3 years
Business group	SettoreServiziRete	Expires	in 2 years
Catalog item	Debian 9 Advanced	Destroy date	August 2, 2023 11:45 PM

[HIDE DETAILS](#)

In the upper band, you can see some pieces of information about your deployment. Like how much you are spending and the forecast date of expiration. At the right end there is the usual “*Actions*” button. It's the same as in the previous page.

Clicking “*Hide Details*” closes this band leaving more space for the other section.

In the lower half you can see two tabs: *Components* and *History*.

## HISTORY

Components **History**

Requests

- 6/9/20 3:09 PM Claudio Redaelli
- 6/9/20 12:39 PM Claudio Redaelli
- 6/9/20 12:37 PM Claudio Redaelli
- 6/9/20 12:35 PM Claudio Redaelli
- 6/9/20 12:28 PM Claudio Redaelli
- 6/9/20 12:28 PM Claudio Redaelli
- 6/9/20 11:47 AM Claudio Redaelli

Events Request inputs

#1814 - Reconfigure **Successful** Requested by: Claudio Redaelli Requested on: June 9, 2020 3:09 PM

Volume 'Hard disk 1' updated. (30) GB changed to (40) GB. Total storage changed from (1054) GB to (1064) GB.

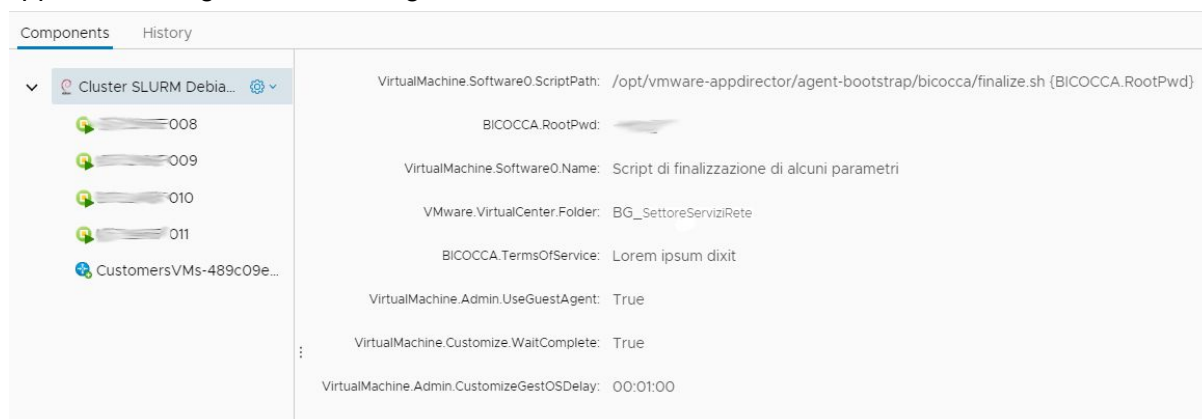
Tasks	Component	Status	Start Time	Completion Time
Submitted	Deployment	Successful	June 9, 2020 3:09 PM	June 9, 2020 3:09 PM
Pre-approval	Deployment	Approved	June 9, 2020 3:09 PM	June 9, 2020 3:09 PM
Reconfigure	Deployment	Successful	June 9, 2020 3:09 PM	June 9, 2020 3:12 PM
Post-approval	Deployment	Approved	June 9, 2020 3:12 PM	June 9, 2020 3:12 PM
Completed	Deployment	Successful	June 9, 2020 3:12 PM	June 9, 2020 3:12 PM

The “*History*” tab show you all actions you performed on this deployment or any of its components with their outcome, start date and other details.

You may scroll down the list on the left to go backward in time and see older actions.

## COMPONENTS

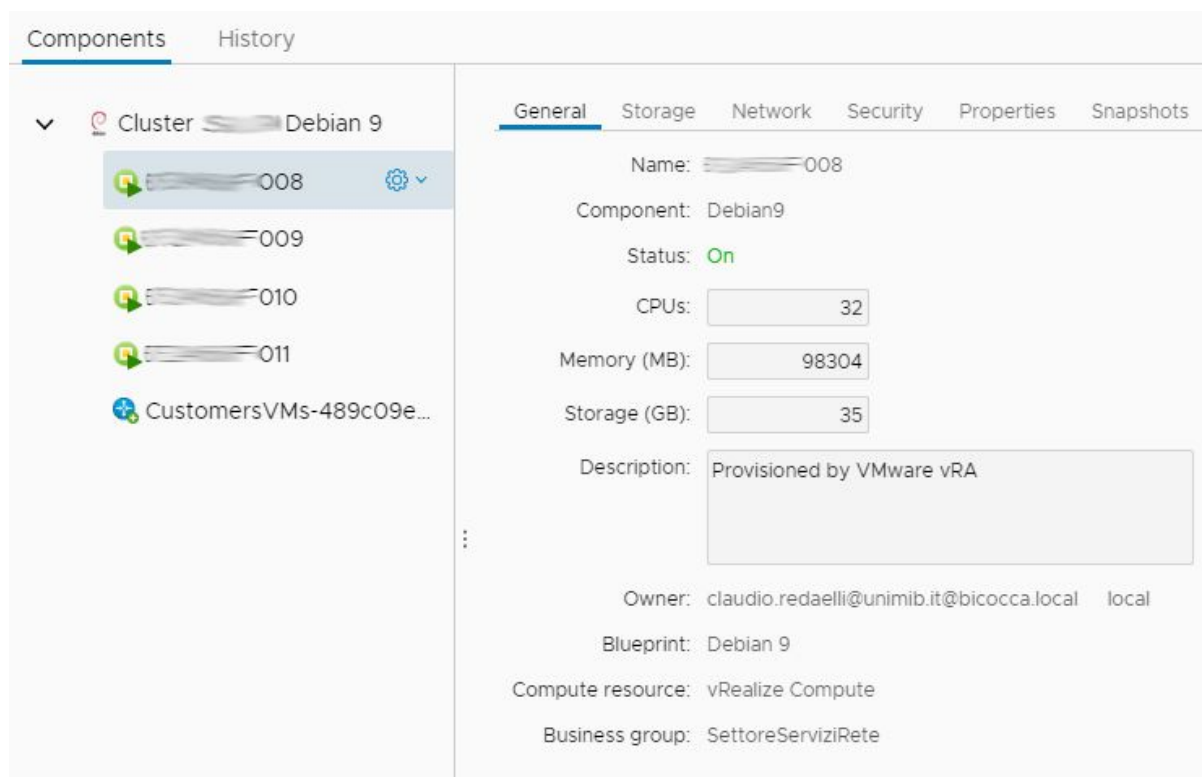
In the “*Components*” tab you can see a vertical list of objects, represented by different icons meaning different types of object. For each of them, in the right frame, will be displayed a particular set of data. Also, if you pass you mouse over the object name, a gear icon will appear. Clicking this icon enlarges an actions menu.



This object represents you deployment. In the data frame you can see some parameters set during the deployment request. The only piece of information you need in this page is the root password you set at request time, in case you forget it.

**BEWARE:** if you change the root password in any virtual machine after its initial deployment, it WILL NOT be reflected here. On the other hand, this password will be the initial password of any other virtual machine you may request by scaling this deployment out.

The actions you can perform in the gear menu are the same as in the deployment list page.



If you select a virtual machine object, the data frame will show you its hardware parameters. In storage tab you can see how many disks are attached to this virtual machine and their sizes.

In Network tab you can see virtual machine's IP and Mac address.

Connect to Remote Console

Connect using VMRC

Delete Snapshot

Destroy

Install Tools

Power Cycle

Power Off

Reboot

Reconfigure

Reprovision

Revert To Snapshot

Shutdown

Suspend

The actions you may perform on a virtual machine are:

- **Connect to Remote Console:** opens a new browser window in which you can access your virtual machine login terminal.
- **Connect using VMRC:** the same, but you must have installed the VMware Remote Console.
- **Take/Revert to Snapshot:** you may take one snapshot for your virtual machine, and revert to it any time.
- **Delete Snapshot:** you can delete your snapshot when you do not need it anymore, or need to create a new one.
- **Install Tools:** upgrade tools that let the virtual machines communicate with the infrastructure. You should never need to do it manually.
- **Power Cycle:** resets the virtual machine.
- **Power Off:** powers the virtual machine off instantly.
- **Reboot:** causes the virtual machine to reboot cleanly.
- **Reconfigure:** lets you change virtual machine hardware parameters. New memory size or CPU number will be automatically seen without the need to reboot your machine.
- **Reprovision:** it turns your virtual machine off and destroys it. Then it re-instantiates it totally clean. Beware before using this action. **YOU WILL LOSE ALL VIRTUAL MACHINE CONTENTS.**
- **Shutdown:** causes the virtual machine to shutdown cleanly and remain off.
- **Suspend:** freezes the virtual machine, saving its memory content. In fact, it's like putting the virtual machine in pause. When suspended, it consumes no CPU or memory.

## Connecting to Remote Console

If you don't want to use the "root" account to remotely access your virtual machine, you will need to create at least one unprivileged user. To do so you must log into the virtual machine console at least once.

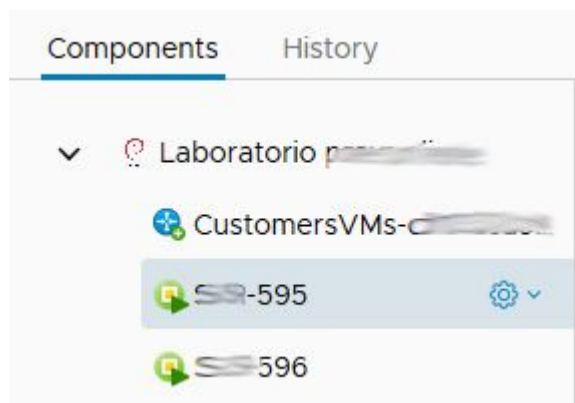
From the action menu select "Connect to Remote Console". A new browser window will appear and in a few seconds you will see your virtual machine login terminal.

Now login with "root" and the password you set when requesting the deployment. Once you are logged you have full access to all operating system features.

## Re-configuring your Virtual Machine

When you request a deployment, you may get up to 12 virtual machines. But you are going to have that many clones configured with the same amount of virtual resources. If you want to differentiate CPU, ram and storage, you will need to re-configure your just deployed virtual machines.

Once your deployment request is completed you can click on its name and see the single virtual machines and their details.



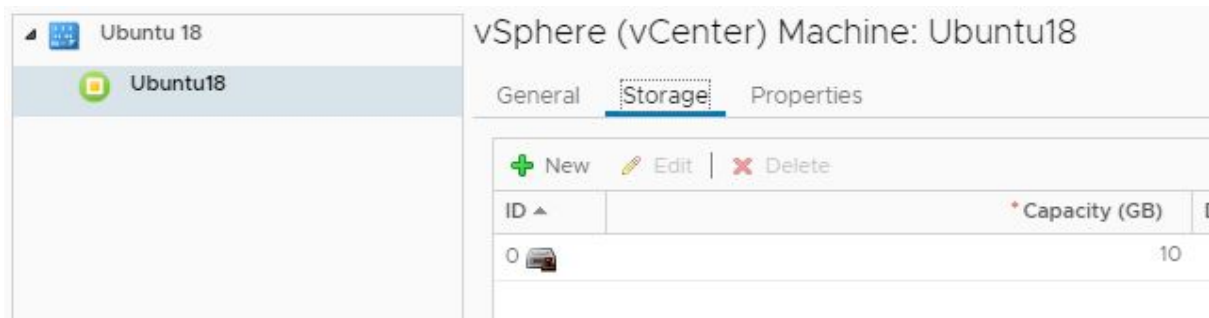
If you select a virtual machine and highlight it, a gear icon will appear next to it.

Clicking on this icon will expand a menu of "Actions".

Select and click "Reconfigure" to change the hardware resources assigned to that virtual machine.

## EXPANDING STORAGE

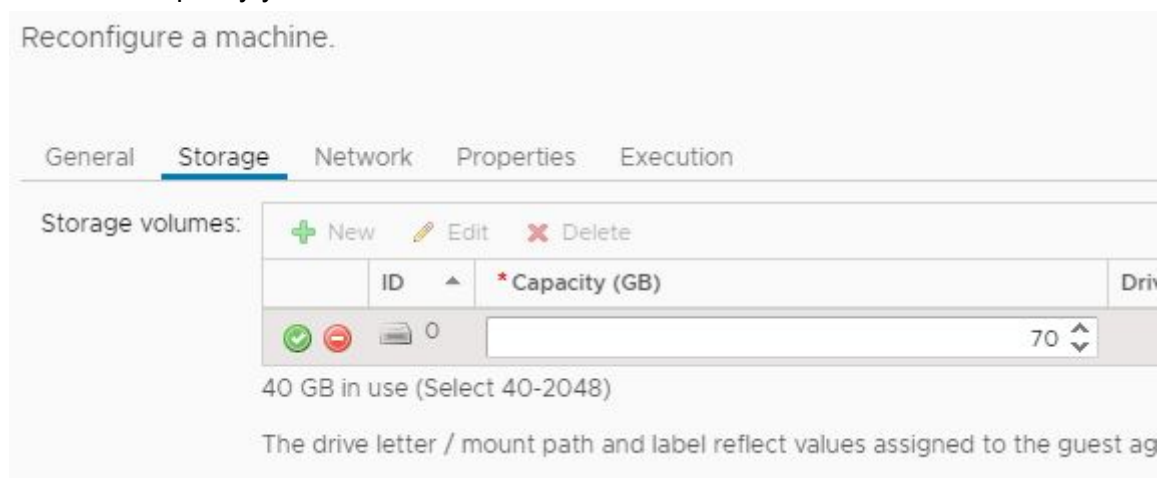
When you request a new virtual machine, you will get as much storage space as it is configured for that virtual machine model.



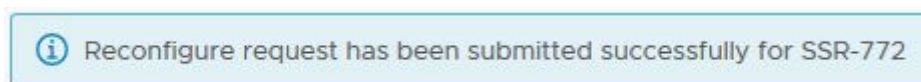
At request time you CANNOT expand the main disk capacity. For example, if you request a Ubuntu 18.04, your virtual machine is configured to have a 20 GB disk and you cannot enlarge it. But you can add a new virtual disk the size you wish. If you add a second virtual disk you will need to configure its partitioning and format it inside the operating system.

Anyway, the most common way to expand storage capacity is to request a virtual machine with the standard disk and expand it once it is created.

To add more capacity to a virtual machine main virtual disk, once you are in the reconfiguration page, select the storage tab and double click on the disk capacity, enter the NEW total capacity you wish and confirm it with the button.



Then your request. You should a message like this, indicating that your request is being evaded:



Once it finishes, you'll have to expand your partition and file system.


## LINUX System

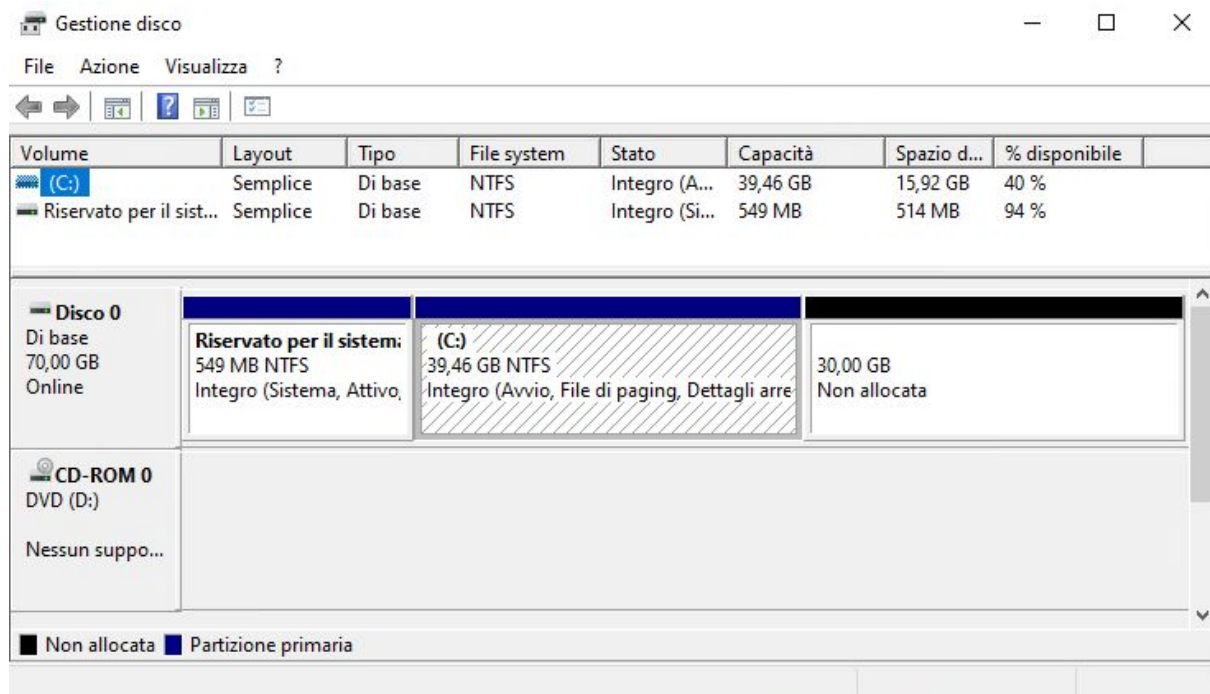
In a Linux system, log into the virtual machine and launch the following command:

```
root@SSR-772:~# expandRoot.sh
```

It will expand your file system to the new total capacity of the disk.

## WINDOWS System

In a Windows system, log in as an administrator and open Disk Management. You can find it by right clicking on the window icon (  ) in the lower left corner of the screen and select it from the menu.



You'll be prompted with a new window in which you can see your VM's virtual disk set in three partitions. The rightmost section is your unallocated space, the one you just added. Now right click on C: and select "Extend Volume". Just click "Next" to the end of the procedure and you'll have your file system enlarged to the size you wanted.