CST VMWare Documentation

Login to the vSphere Web Client using a web browser by navigating to
https://cstvmware.ridgewater.edu/ui/. Chrome is the best for this, but others will work. You will
see a page like this:

Login with your firstname.lastname and the password you set. If you do not know how your
name is formatted, or it isn't working properly, look it up using the password reset site. You have
to do all password management through that site. You can get this site address by looking at
the "Login Assistance" link.

Depending on what you are wanting to do, go to the page listed below:

If you are having any questions, please don't hesitate to ask.

CST VMWare Documentation

Create a VM from a Template

A template is a pre-created VM that has been configured and has the Operating System already installed. Only use the template if your instructor tells you to do so as it is a much better learning experience for you to install the operating system yourself. Templates are normally used when time is limited.

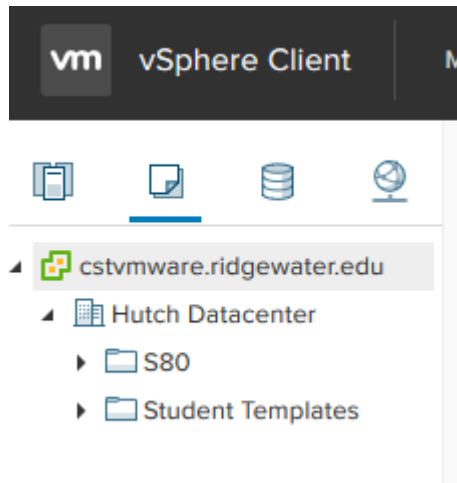First, navigate to VMs and Templates. It is the little icon that looks like paper.
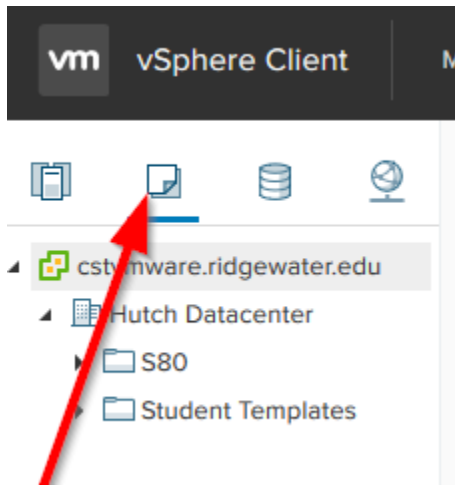
You can also get to it by clicking on Menu and selecting VMs and Templates.

CST VMWare Documentation
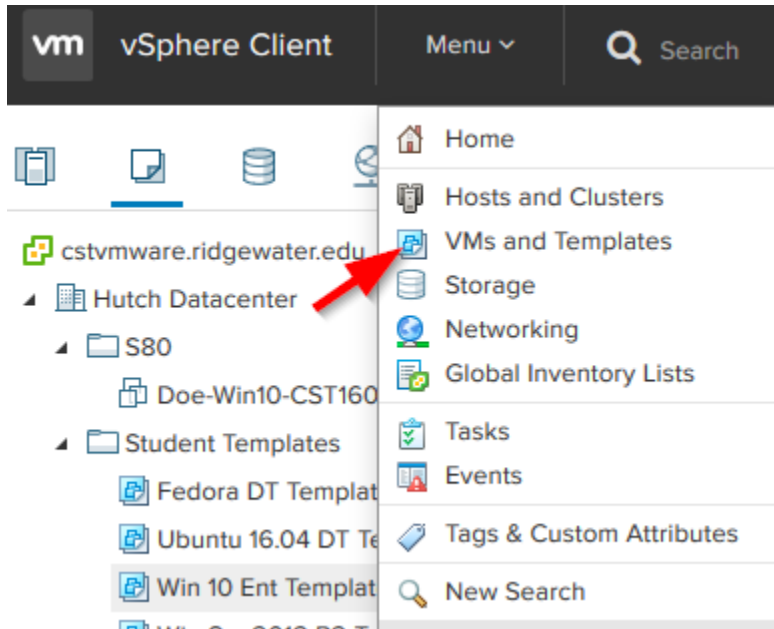
On the left hand side will change to your VMs and template view.

By expanding the different folders, you will see the different virtual machines and templates that you have access to.
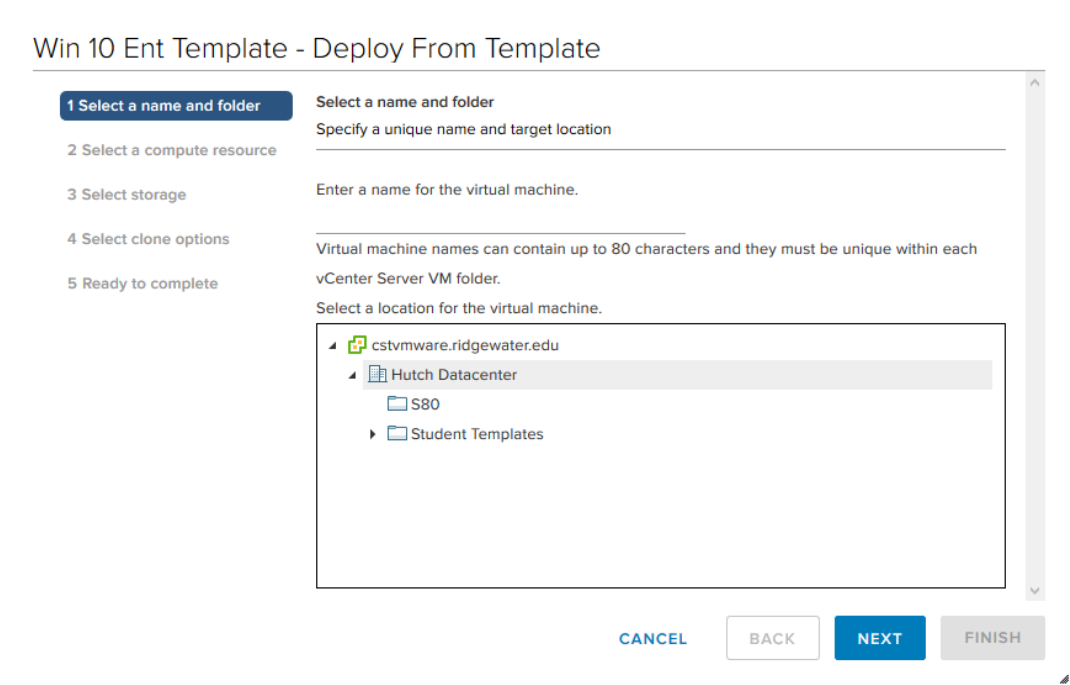
The templates that are available to you are listed under the "Student Templates" folder.

CST VMWare Documentation

To create a VM from one of these templates, select the template that you would like to create a VM with and right click on it and select "New VM from this template…"
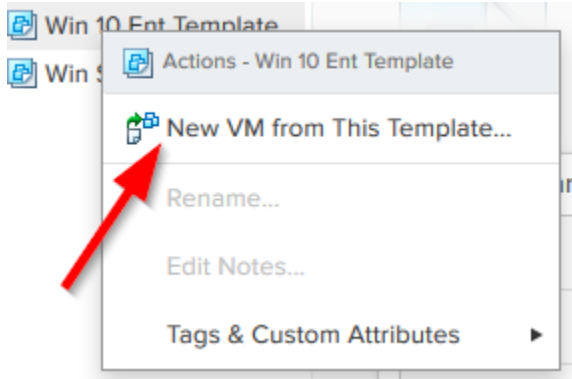
You will be presented with a page like this:

For the name, follow the following format unless your instructor tells you different.

LastName-OS-Class

I.E. Doe-Win10-CST1072

This gives both you and the administrators of the system an idea of exactly what it is for.

Select your S# for the folder location. If you don't see it, make sure to expand the section of Hutch Datacenter. Press "NEXT'.

CST VMWare Documentation

You will be presented with this screen:

Win 10 Ent Template - Deploy From Template

✔ 1 Select a name and folder
2 Select a compute resource
3 Select storage
4 Select clone options
5 Ready to complete

Select a compute resource
Select the destination compute resource for this operation

▲ 🏢 Hutch Datacenter
  ▲ 🗂 CST Cluster
        📱 134.29.175.129
        📱 134.29.175.130
        📱 134.29.175.132

Compatibility

✔ Compatibility checks succeeded.

CANCEL   BACK   NEXT   FINISH

Select an IP address for which host to put it on from the list. Again, if you don't see the host list, make sure you are completely expanded. Click "Next".

CST VMWare Documentation

You will then be brought to a datastore selection page.

Select your S# from the list and click "NEXT". It is the only one that will let you go forward anyways.

CST VMWare Documentation

You will then be brought to a select clone options page.

You can select if you want to power it on right away if you want, but otherwise just click "NEXT".

You will then be brought to a summary page. Review the summary and press "FINISH" if you are satisfied with the settings.

If your VM doesn't create, check the bottom right hand corner of the main page for errors.

When you power up the VM, the default password will be password123$ for the student account.

CST VMWare Documentation

Now we need to connect the VM to our internal student network. To do this, simply right click on the VM you just created from the VM's and Templates list and choose "Edit Settings…"
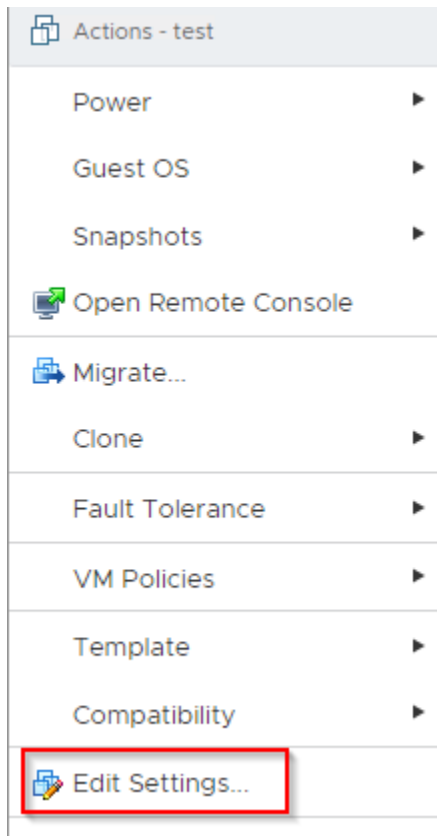

From this window you can edit just about any setting for that virtual machine. To connect your VM to your network, go to Network adapter 1 and click on the drop-down menu for the networks and choose "Browse". It will most likely be selected as "Warzone" right now.

CST VMWare Documentation
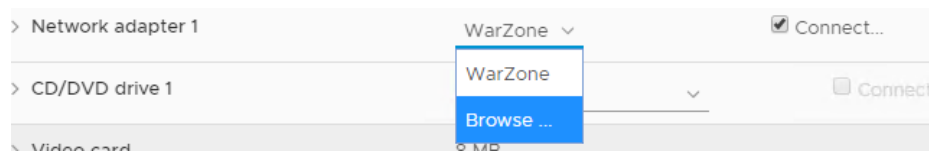
It will then bring up a list of networks that you have access to. Select the network labeled S## Internal unless instructed otherwise by your instructor and press OK.
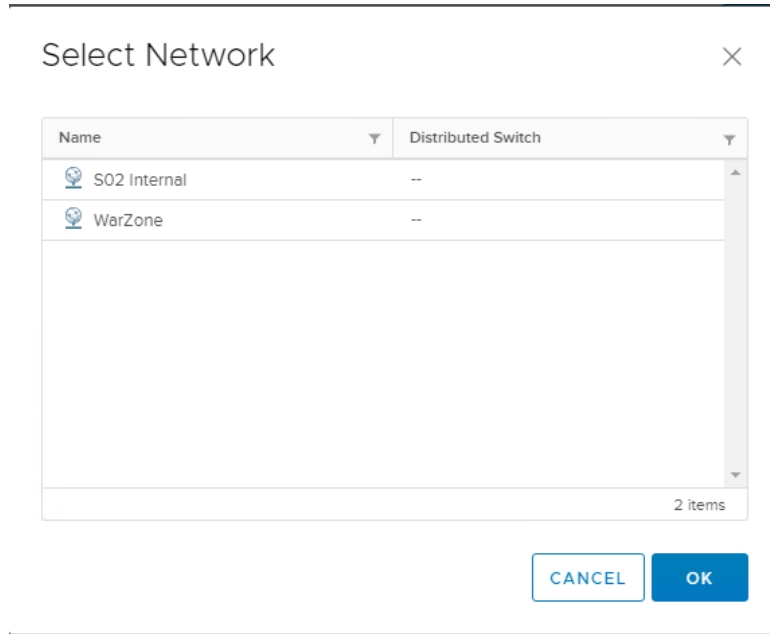
Then go ahead and press OK on the edit settings window to confirm your changes.

There ya go ☺ That is how you create a VM from a template and edit a VM's settings ☺

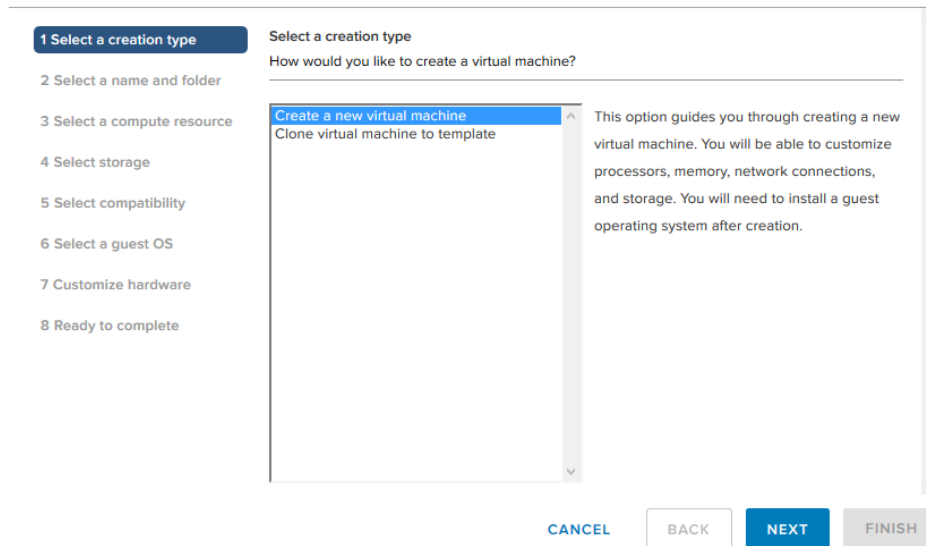See the "Using your current VMs" for how to access your VMs.

Create a VM from an ISO

To create a new VM using an ISO file, first ensure you are on the VMs and Templates page.
Then, right click on your S# in the folder view and select "New Virtual Machine"
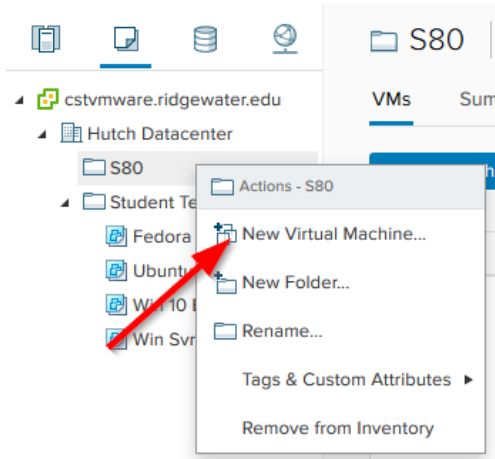
A new window will pop up.

Select Create a new virtual machine and press "Next".

CST VMWare Documentation

You will then be presented with a page like this:

For the name, follow the following format unless your instructor tells you different.

LastName-OS-Class

I.E. Doe-Win10-CST1072

This gives both you and the administrators of the system an idea of exactly what it is for.

Select your S# for the folder location. If you don't see it, make sure to expand the section of Hutch Datacenter. Press "NEXT".

CST VMWare Documentation

You will then get to a page like this:

Select an IP address for which host to put it on from the list. Again, if you don't see the host list, make sure you are completely expanded. Click "Next".

You will then be brought to a datastore selection page.

Select the datastore labeled with your S# and press "NEXT"

CST VMWare Documentation

On this page, just leave the defaults and press "NEXT"

New Virtual Machine

✔ 1 Select a creation type	**Select compatibility**
✔ 2 Select a name and folder	Select compatibility for this virtual machine depending on the hosts in your environment
✔ 3 Select a compute resource	The host or cluster supports more than one VMware virtual machine version. Select a
✔ 4 Select storage	compatibility for the virtual machine.
5 Select compatibility	Compatible with: ESXi 6.0 and later ▾
6 Select a guest OS	This virtual machine uses hardware version 11, which is also compatible with ESXi 6.5.
7 Customize hardware	
8 Ready to complete	

CANCEL   BACK   **NEXT**   FINISH

You will then be presented with an OS selection page. Select the OS you will be installing and press "NEXT". The ISOs on the server are generally 64bit.

New Virtual Machine

✔ 1 Select a creation type	**Select a guest OS**
✔ 2 Select a name and folder	Choose the guest OS that will be installed on the virtual machine
✔ 3 Select a compute resource	Identifying the guest operating system here allows the wizard to provide the appropriate
✔ 4 Select storage	defaults for the operating system installation.
✔ 5 Select compatibility	Guest OS Family: Windows ▾
6 Select a guest OS	Guest OS Version: Microsoft Windows Server 2016 (64-bit) ▾
7 Customize hardware	
8 Ready to complete	

Compatibility: ESXi 6.0 and later (VM version 11)

CANCEL   BACK   **NEXT**   FINISH

Now comes the very important part, so pay attention and do it exactly as written, unless your instructor specifically tells you otherwise.

CST VMWare Documentation

You will be presented with a hardware customization page.

For the CPU and memory, you can generally leave them as they are. Below is a list of recommendations for the different OS's

Linux:

CPU: leave at default, if extremely slow, power it down and add another CPU. Should be fine at default.

RAM: move to 2 GB.

Windows:

CPU: leave at default, if extremely slow, power it down and add another CPU. Should be fine at default.

RAM: move to 4GB if it isn't at 4 GB.

There are a few things that need to get changed from the defaults. We will discuss those in further detail on the next page.

CST VMWare Documentation

The first one is the hard drive type. We need to change it from Thick Provisioned to Thin Provisioned. This will help conserve your space so you don't run out before you can create all your VMs.

To do this, select the ">" next to where it says "New Hard disk *"

The only setting to change here is the provisioning type.

Change it from the default of "Thick Provision Lazy Zeroed" to "Thin Provision"

You will also need to change what network you are connected to. To do this, select the "New Network *" spot, and choose your network from this list. Ensure that the checkbox that says "Connect…" stays checked.

It is now time to pick the ISO to deploy from.

CST VMWare Documentation

To do this, go to where it says "New CD/DVD Drive *" and select "Datastore ISO file from the dropdown.
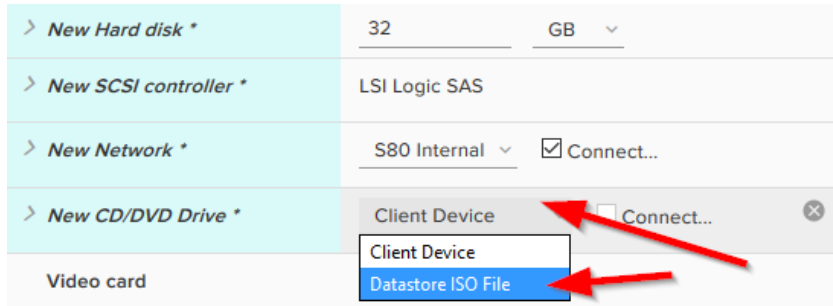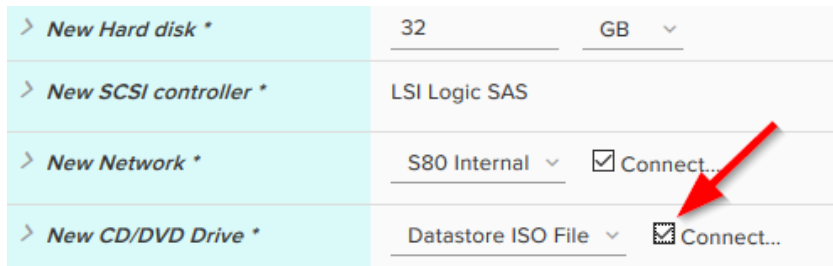

You will then get a window like this:
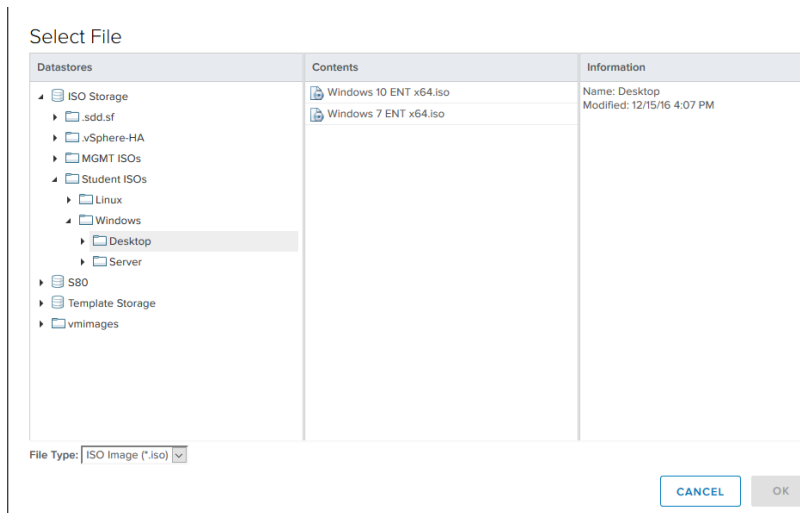
All ISOs that you will need are sitting in ISO Storage → Student ISOs. Then navigate to what you want, select the ISO file and press OK. It will then bring you back to the previous window.

Ensure that the box labeled "Connect…" next to the datastore ISO file is checked.

If it is not, you will not be able to boot to it and you must edit the settings and connect it to get it to boot.

When you have made all of the required modifications to the settings, press "NEXT".

CST VMWare Documentation

You will then be brought to a summary page.

Go through the summary and verify everything is correct. Once you are satisfied with the configuration, press "FINISH".

You have created a VM and set it to boot via the ISO file. You will now have to install the operating system just like normal. If you are unsure of how to do this, you will have to ask your instructor for assistance as installing an operating system varies based on the operating system. An example for windows 8 is included in the Installing OS and VMWare Tools section.
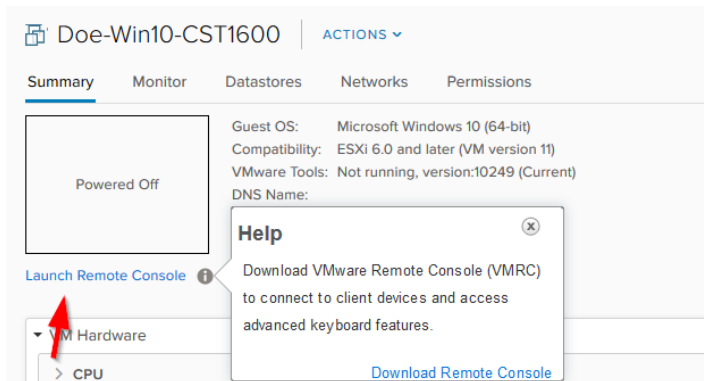
CST VMWare Documentation

View and Use your Current VMs

To view your VMs, navigate to the VMs and Templates spot in the web browser. (Remember – This is the paper icon ☺)
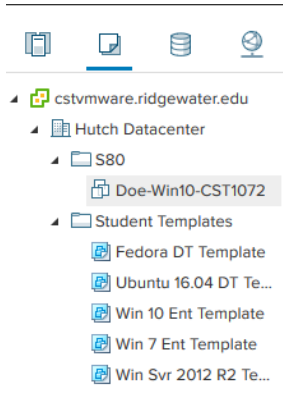

To use your VM, we will have to connect to a console. To do this, click on the VM and on the right side, you will see a summary tab. Select "Launch Remote Console"

If it doesn't launch, make sure you have the Remote Console program installed on your computer. If you don't or are not sure, you can download it by going to http://cst.ridgewater.edu/vmware and downloading it there.

CST VMWare Documentation

A window similar to the image below will popup. If it doesn't look in your taskbar for the yellow arrow thing.
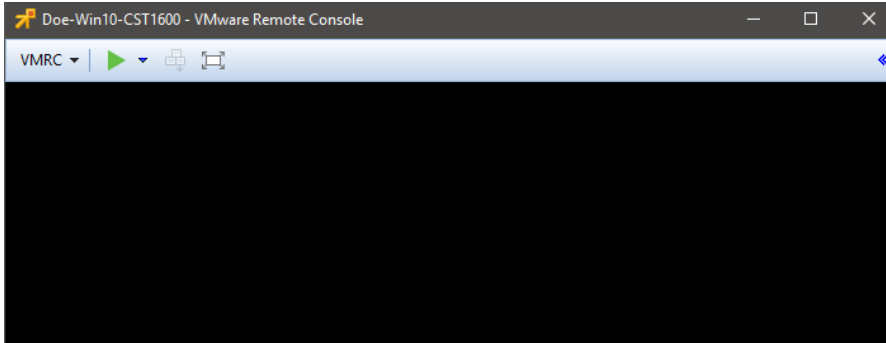
If your VM is not powered on, you will see a green play button in the top bar similar to the picture above. To power it on, simply click on that green play button.

Congrats! That is how you use your VMs

CST VMWare Documentation

Installing the OS and VMWare Tools

Once you have opened the VM in the console window, you will have to install the OS

Please note that installing the operating is different depending on what OS you are installing. If you have any questions, please ask you instructor for assistance. They don't bite ☺ That hard…
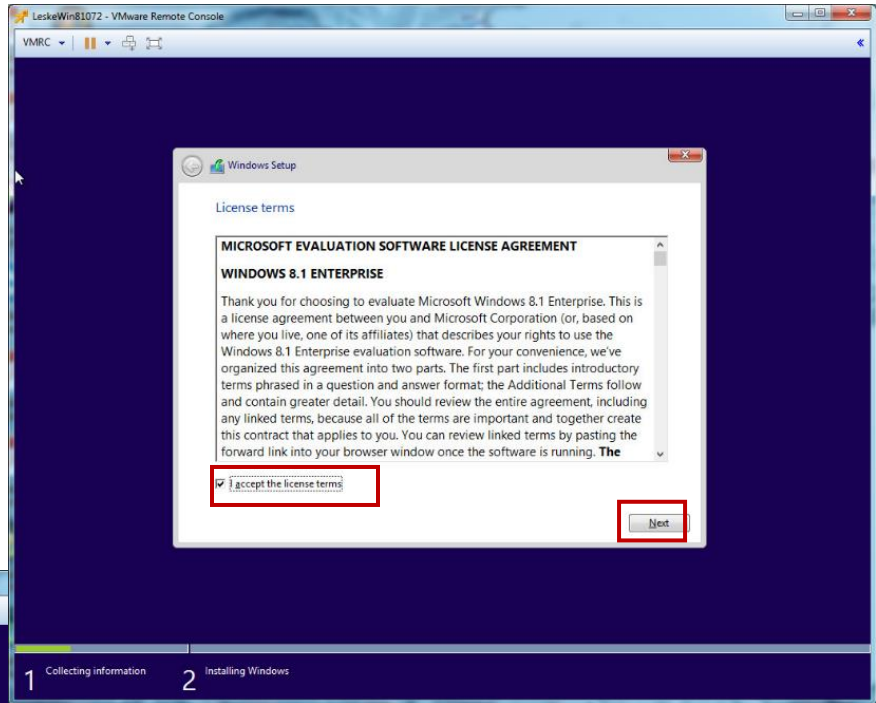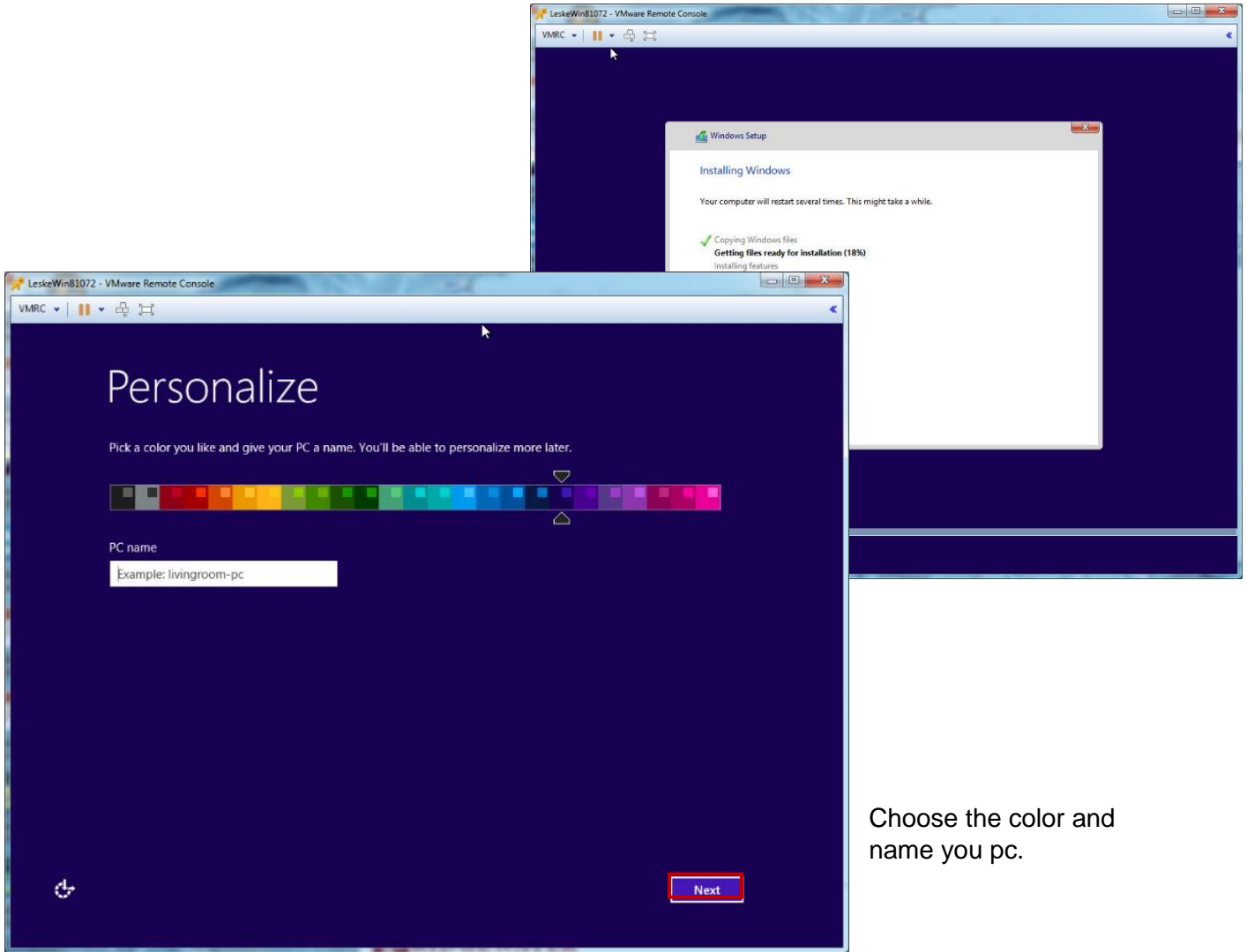
Install the OS.
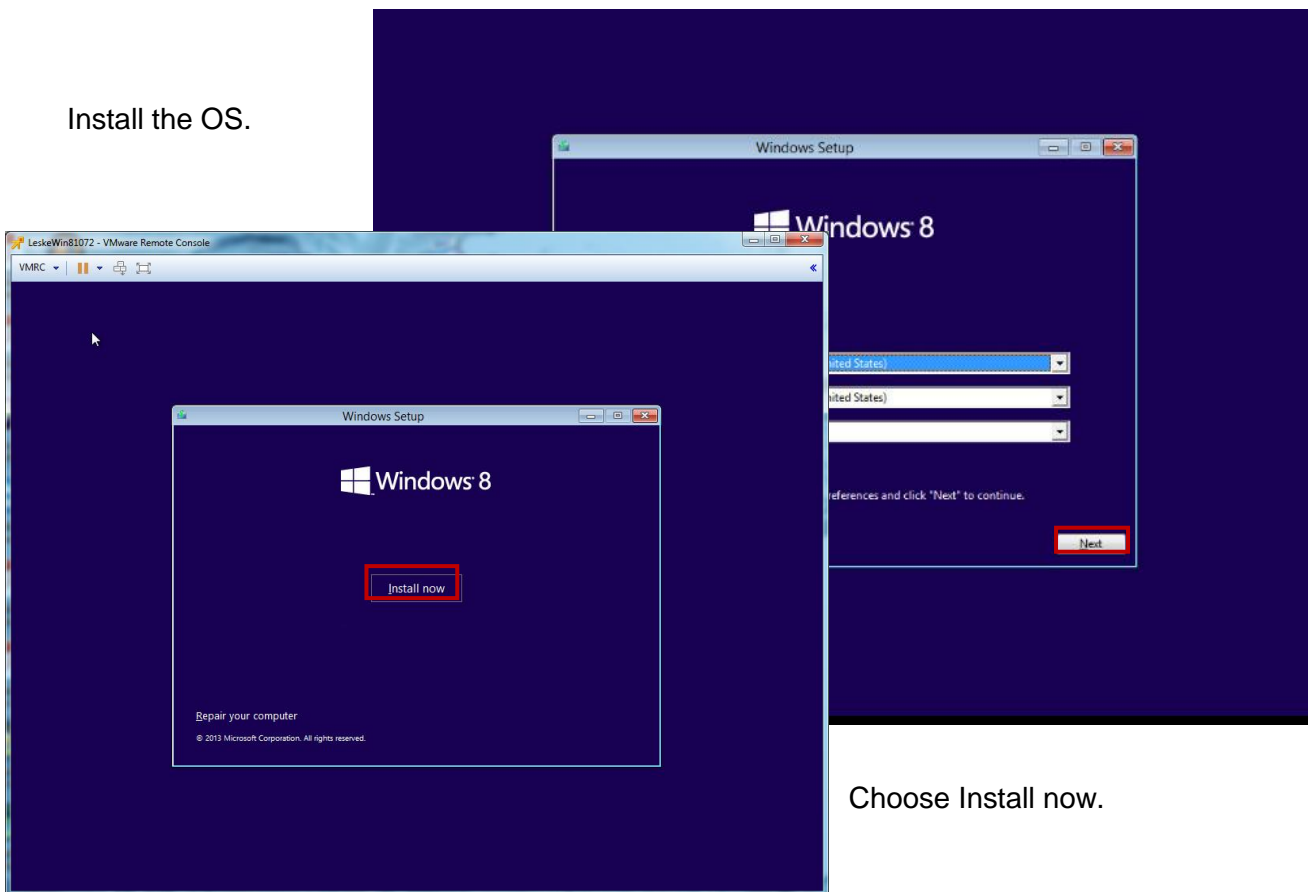
Choose Install now.

Accept the terms.

Choose custom install and not upgrade.

Choose Next.

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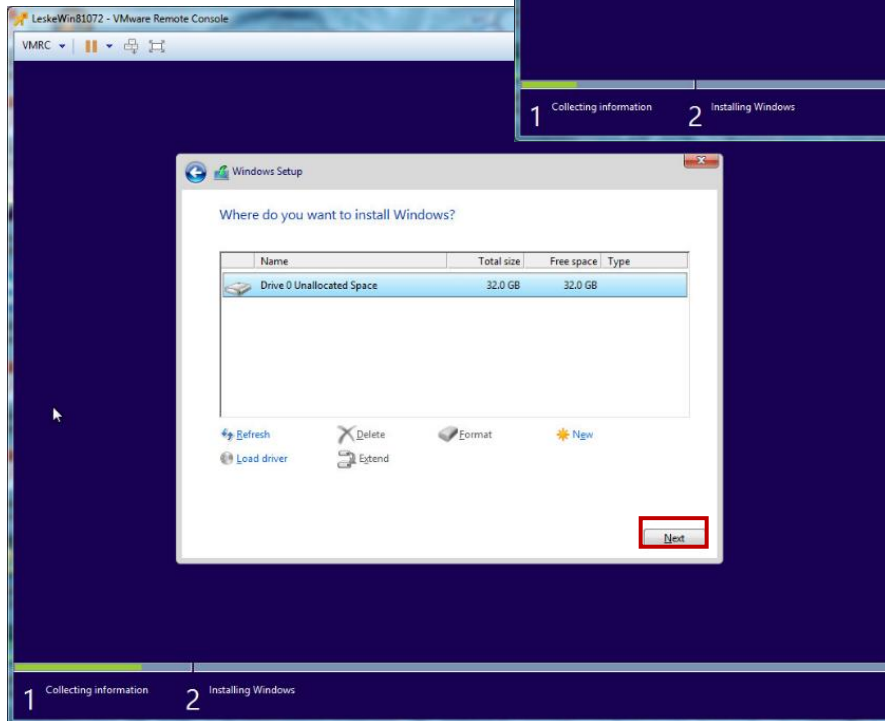
Choose the color and name you pc.

CST VMWare Documentation

Choose express settings.

Create a new account.

CST VMWare Documentation
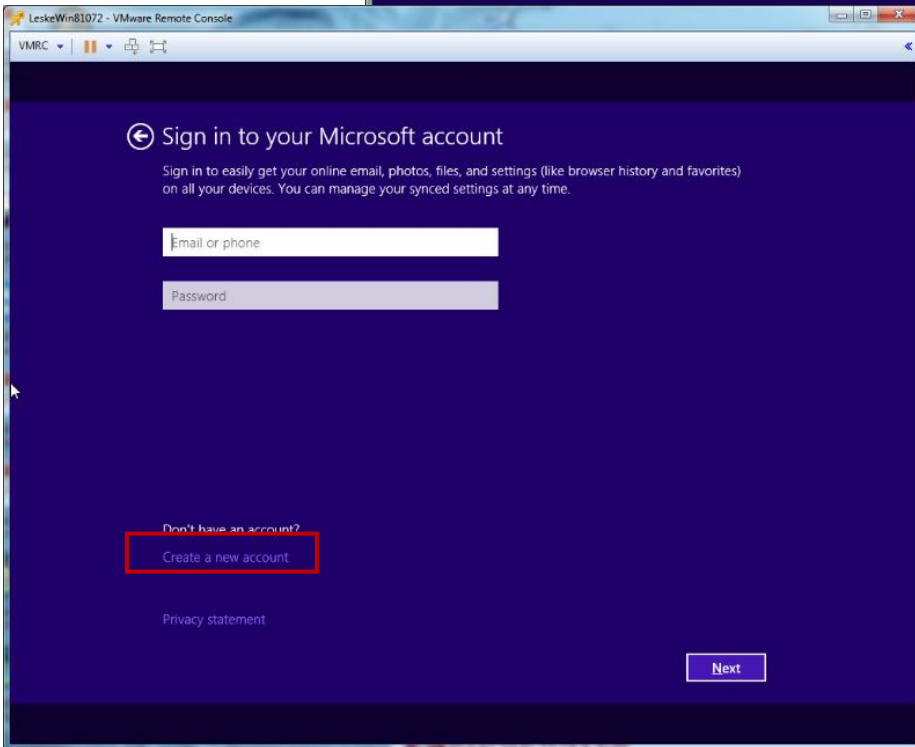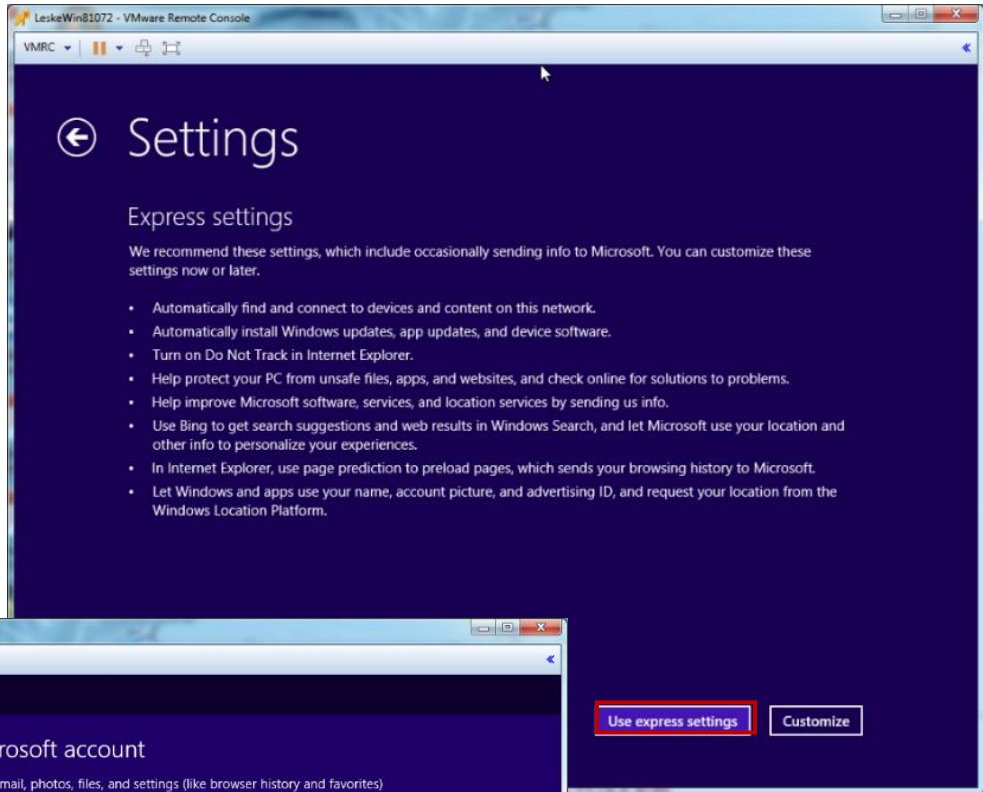
Choose Sign in without Microsoft account.

Add a User Name, either use the password of password123$ or no password, and click Finish.

CST VMWare Documentation

Now your that your OS is installed you will need to install the VMware tools. To do this, open a console to the VM and go up to "VMRC" → "Manage" → "Install VMware Tools…"
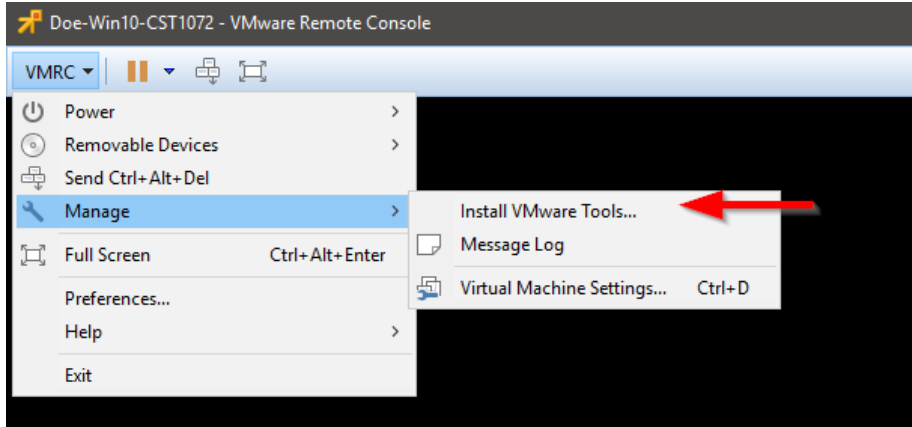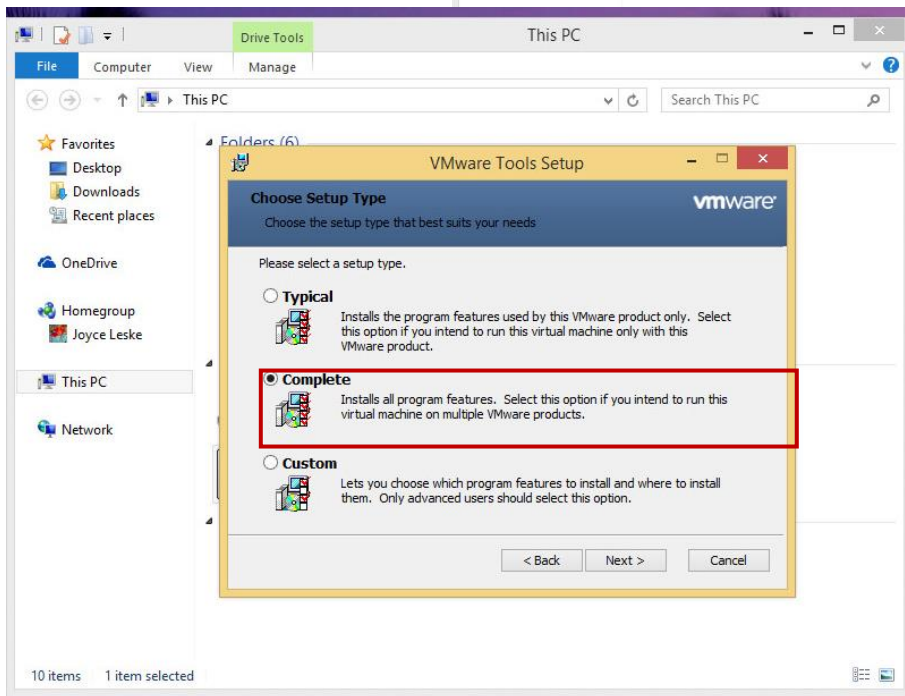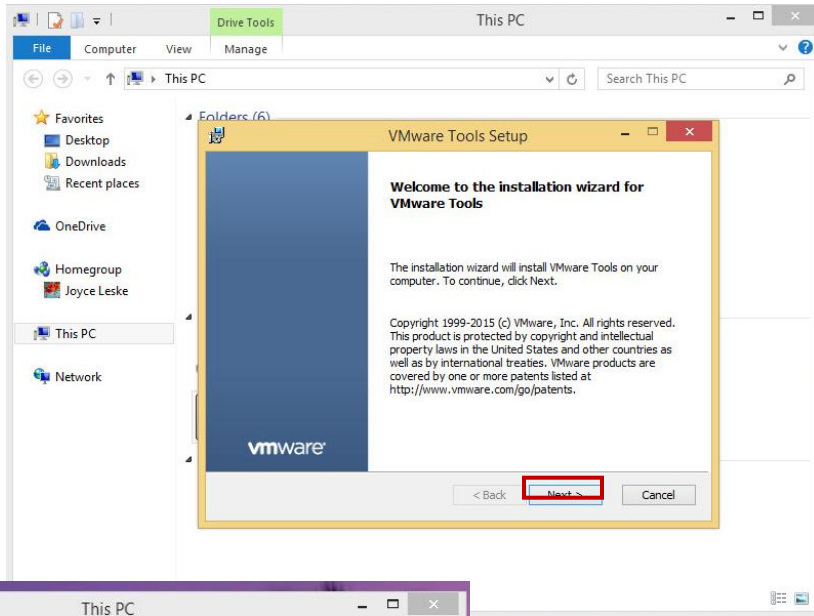

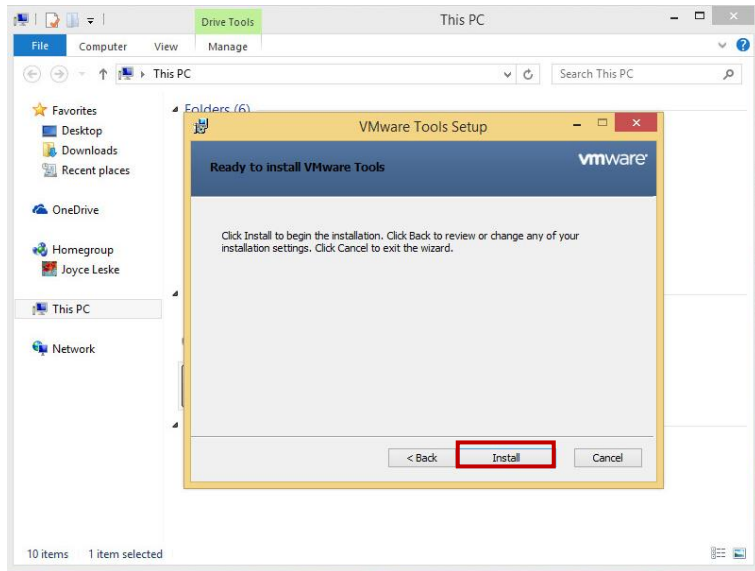Open File Explorer and double click on the DVD Drive.
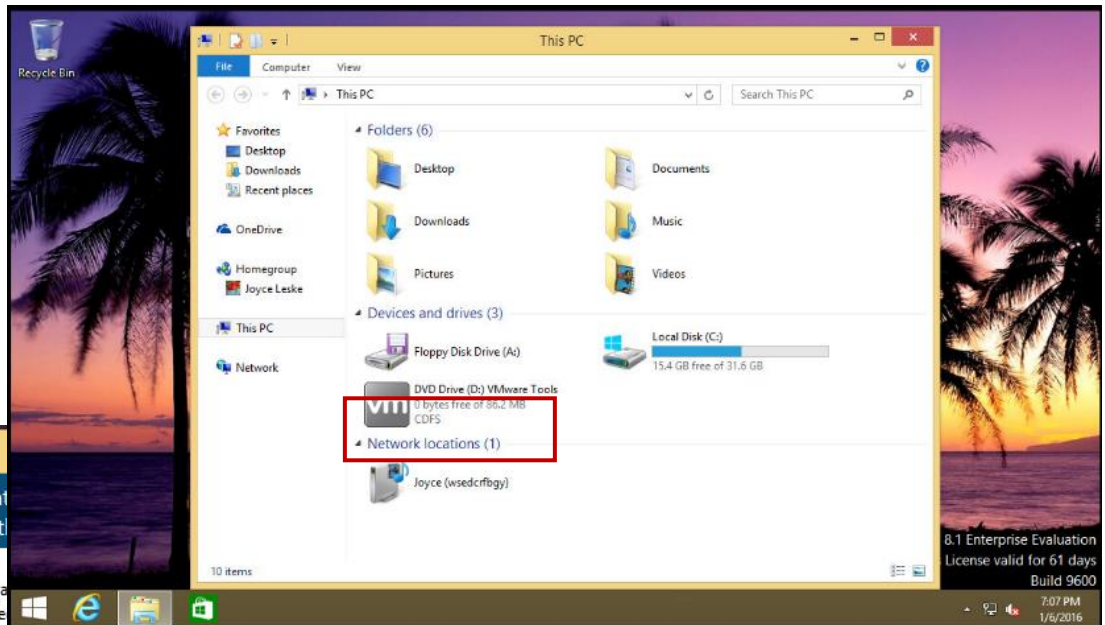
Allow the install click Yes.

CST VMWare Documentation
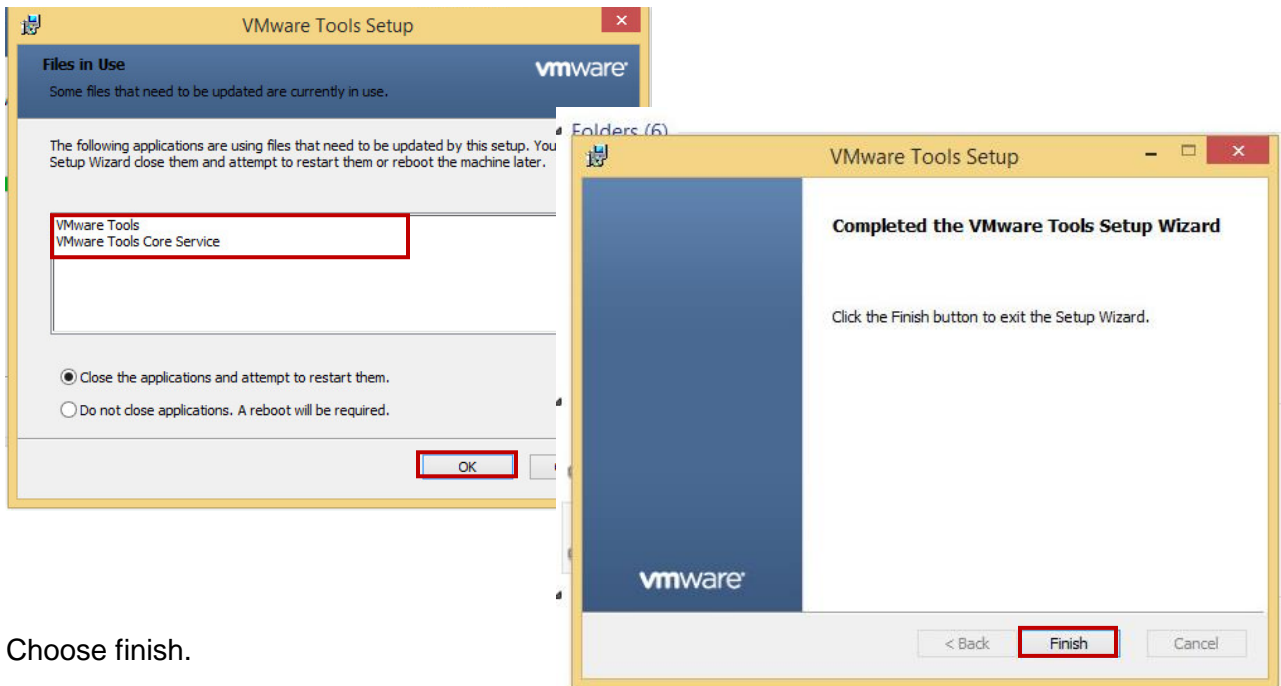
Click Next.

Change to complete and click Next.

CST VMWare Documentation

Choose Install.

If you get a notification to close any programs, close them and choose OK.

Choose finish.

CST VMWare Documentation

Choose Yes to restart the system.
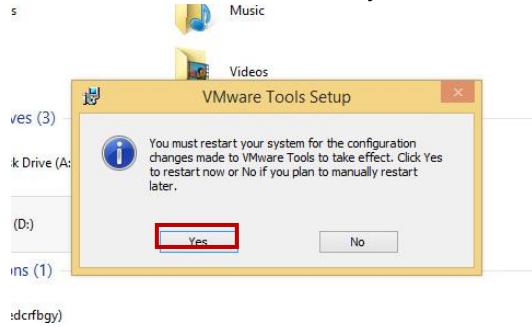
Congratulations. VMware Tools is now installed.

CST VMWare Documentation