

## Virtual Machines - Ubuntu Host with Windows Guest

Download and Install VMware Player from here - <http://www.vmware.com/products/player/playerpro-evaluation.html> using default options.

In `/usr/local/home/userID/Downloads` do:

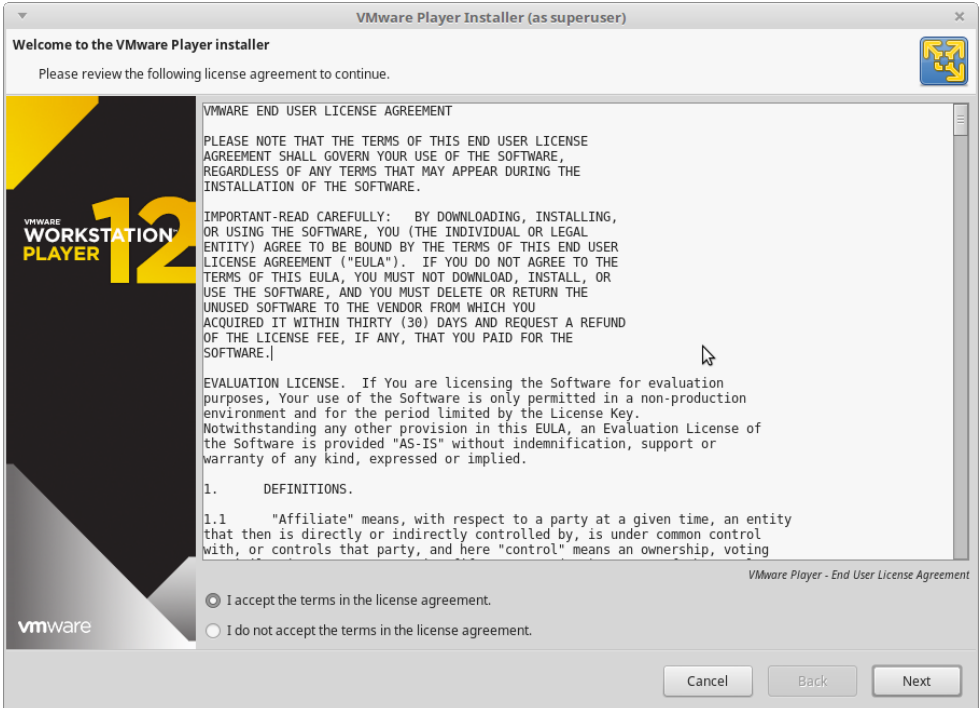
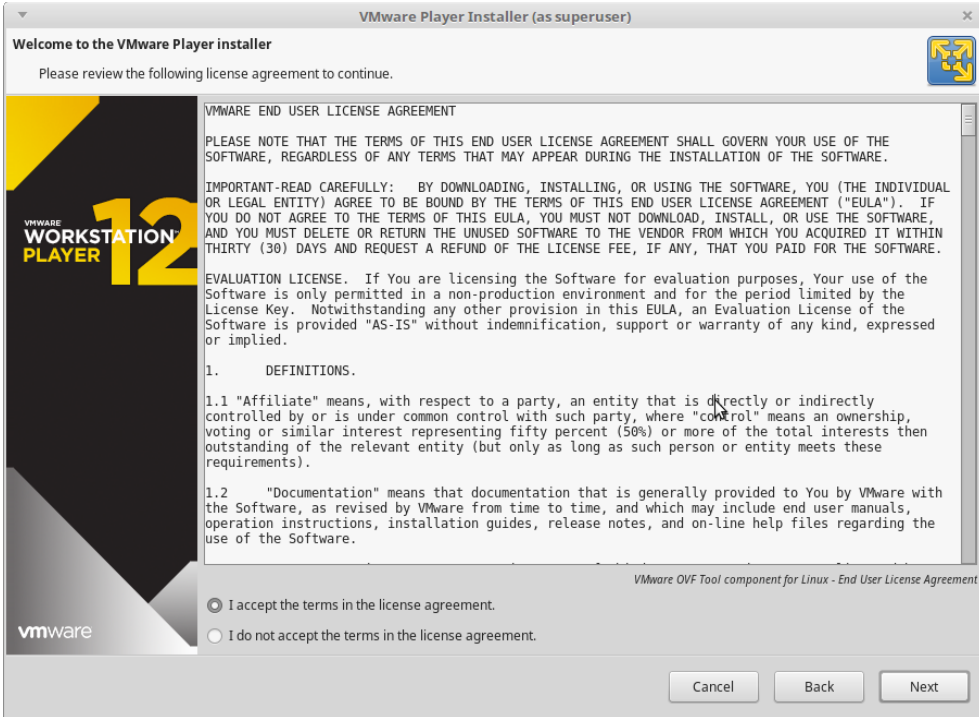
```
chmod +x VMware-Player-X.x.x.bundle
```

Then run:

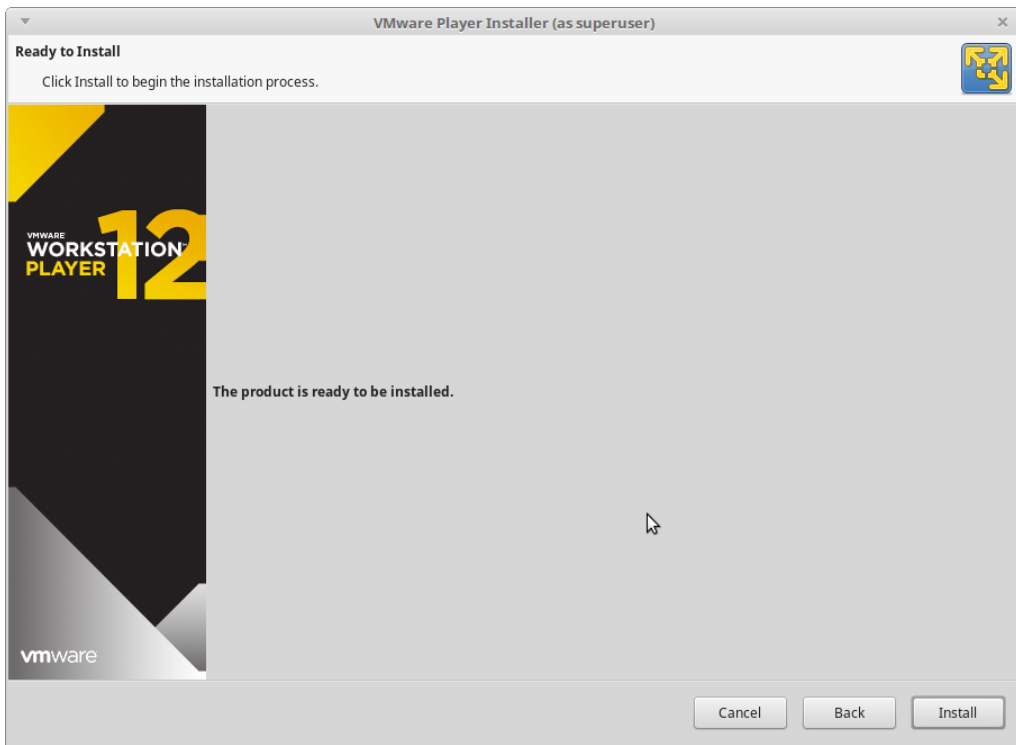
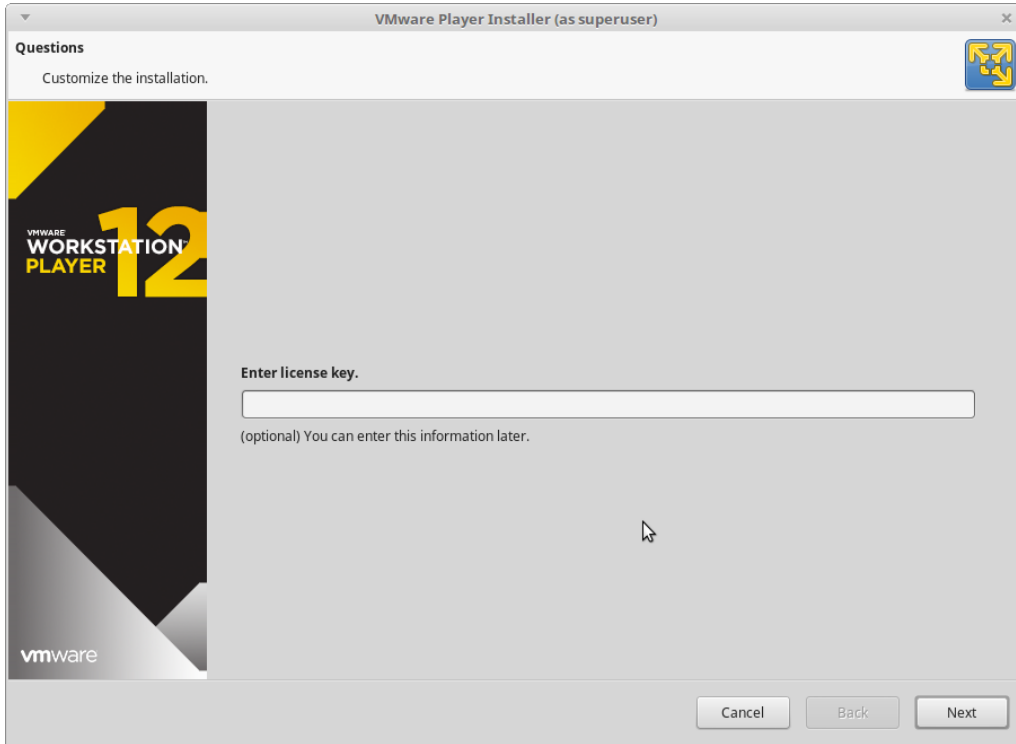
```
sudo ./VMware-Player-X.x.x.bundle
```

Installation of VMware Player on Linux is fundamentally the same as Windows but here are some screenshots.

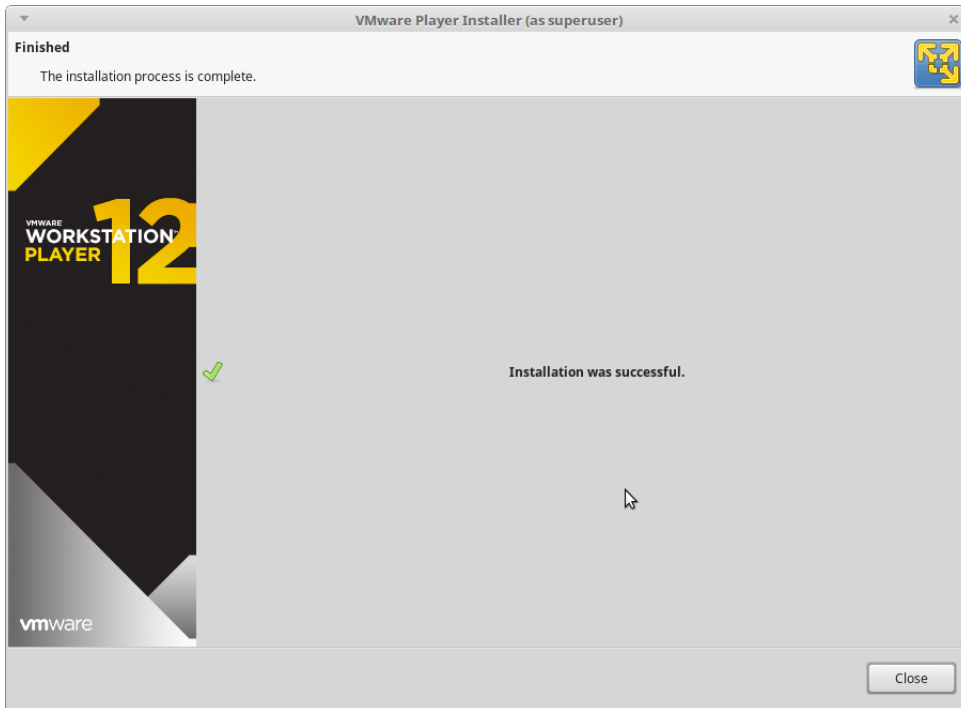
Linux (Ubuntu in our case) can have various window managers, colors and icons. This test system is using Linux Mint with the MATE window manager.



# Creating Virtual Machines

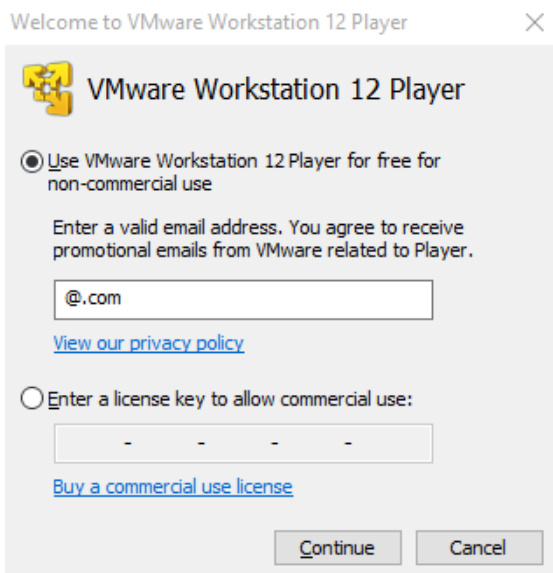


## Creating Virtual Machines



Once the installation is complete, look in your Applications Menu, and search for VMware or look in the System Tools, or Administration section of the Application Menu for VMware Player.

When VMware Player is first opened, a Welcome screen appears.  
Enter an email account to 'register' the software.  
Here, Create a New Virtual Machine and the Wizard tool will begin.



Before proceeding, open a Terminal window and go to **/usr/local** to make a **VirtualMachines** folder and set all users to read/write on that folder.

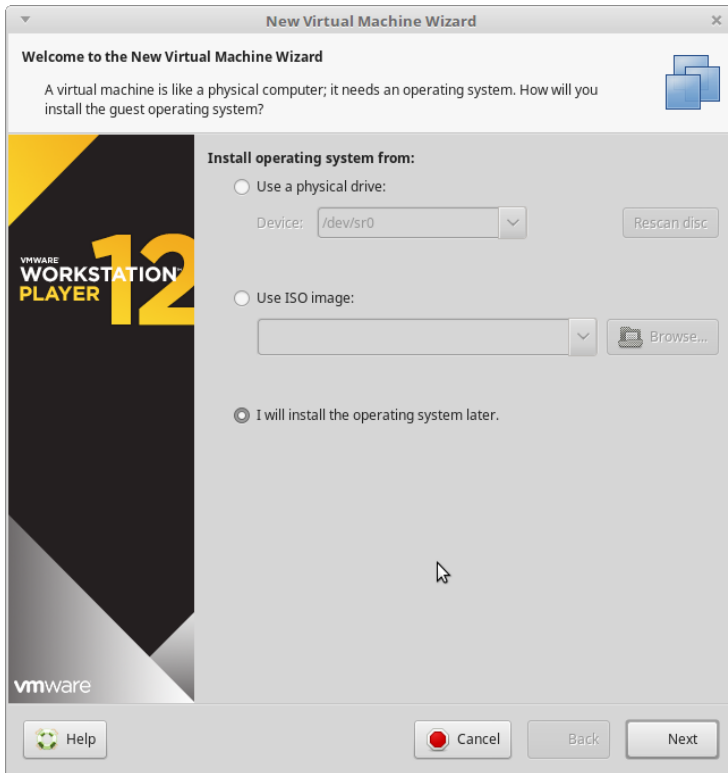
```
sudo mkdir VirtualMachines
```

then

```
sudo chmod -R 777 VirtualMachines
```

## Creating Virtual Machines

Once the folder is created, select, **install the operating system later**.  
Click Next



## Creating Virtual Machines

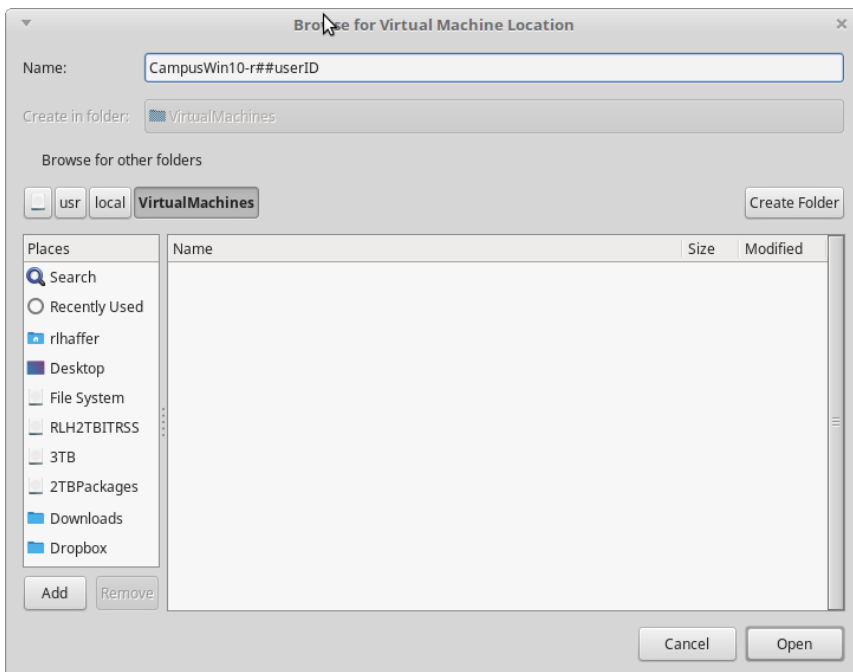
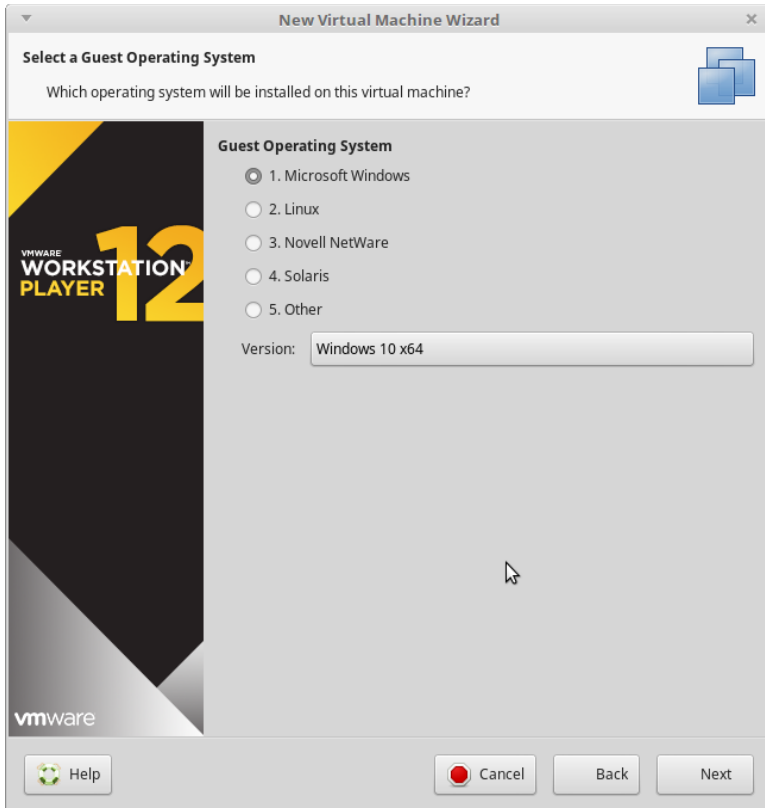
Select **Microsoft** as the OS and **Windows 10 x64** as the version.

Next is browsing for the **VirtualMachines** folder.

Name the virtual machine - **CampusWin10-r##userID**

Inside the **VirtualMachines** folder, create another folder named the same as the virtual machine. In case multiple virtual machines are needed.

Click Next

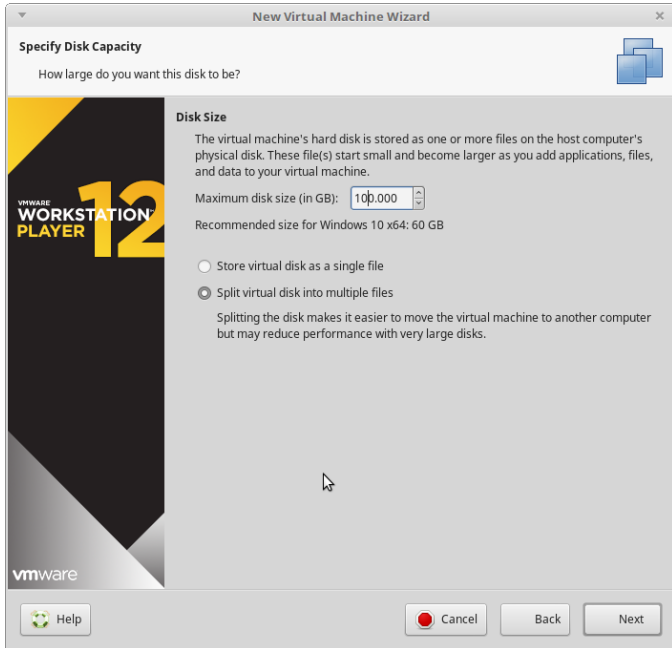


## Creating Virtual Machines

Now decide how large the virtual hard disk should be.

The current Win10 image is around 30GB, as of 12-2016. Adding any design software or mathematical applications can swell that image size to 100GB or more. So, plan accordingly.

Click Next once the drive size is selected. Leave the default **split into multiple files**.

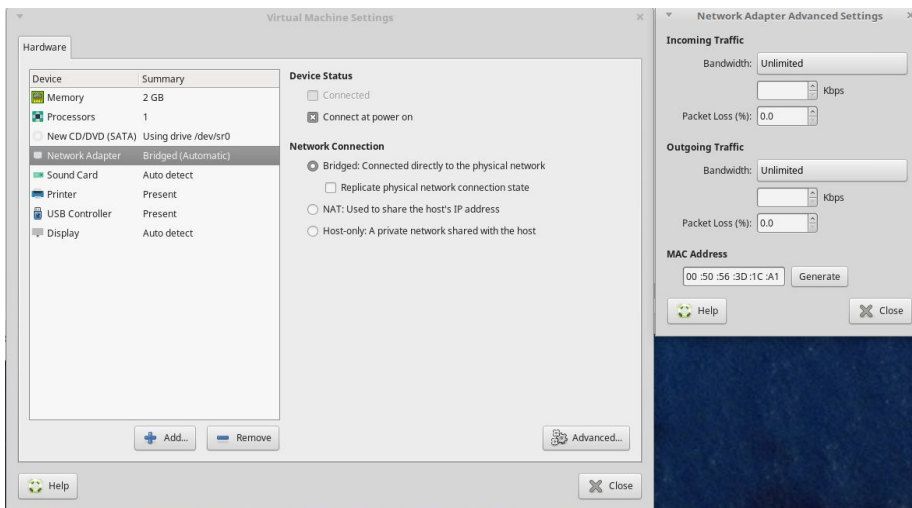


Next, set the **Memory** and **CPU** to desired amounts, then configure the **Network adapter**.

Under Network Connection, change the adapter to **Bridged**, then click Advanced.

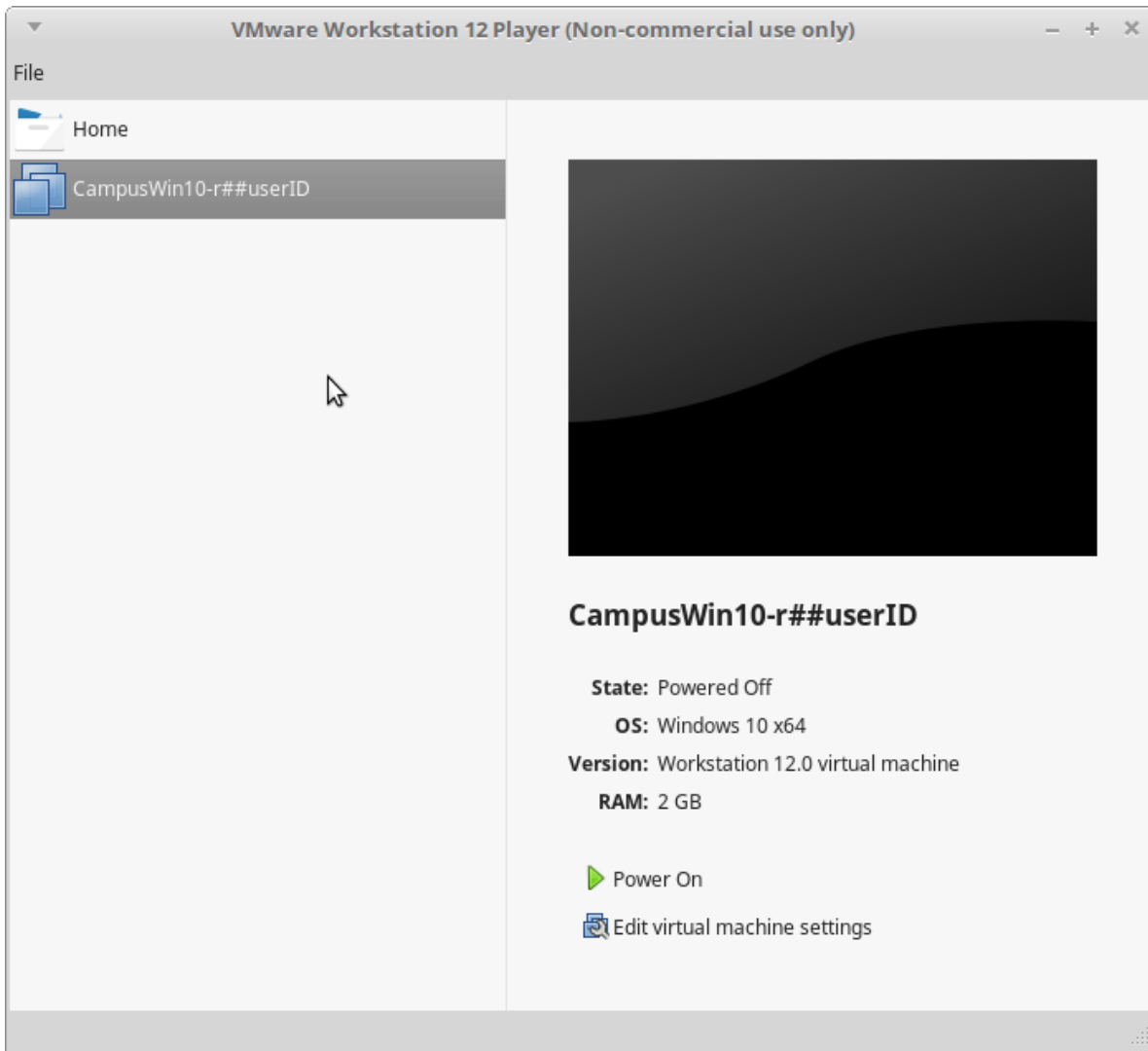
Generate a MAC address for the virtual machine, to be used in NETDB.

Once the Network adapter is configured, click Finish and it will return to the main VMware Player window.



## Creating Virtual Machines

The VM is ready to be used. however it may need to be registered in NETDB and a Win10 template needs to be created to install the OS and packages.



Register the virtual machine as any other domain managed system. Under the Edit Host Details of the registration, add details on the description, such as Win10 virtual machine on **r##userID**.

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## NetDB: Edit Host Details

[Main Menu](#) - [Register Desktop](#) - [Search Hosts](#) - [Create Host](#) - [Edit Host](#)  
[Help Request System](#) - [IT - Campus Web](#)

Search for host:

[Create a new host](#)

[View host details for r89rhafter.managed.mst.edu](#)  
[View history for r89rhafter.managed.mst.edu](#)  
[View host metadata for r89rhafter.managed.mst.edu](#)  
[Refresh Display](#)

Host Information	
Full Host Name:	<a href="#">r89rhafter.managed.mst.edu</a>
Host Domain:	managed.mst.edu
Registration Type:	desktop
Owner UserID:	<a href="#">rhafter (Analyze)</a>
Created:	2016-12-13 14:31:16
Last Modified:	2016-12-13 14:31:16 by <a href="#">rhafter (Analyze)</a>
Host Expiration Date:	Not yet determined.

Owner Details	
UserID:	<a href="#">rhafter (Analyze)</a>
User Type:	Faculty/Staff
Name:	Haffer, Randy
Department:	Information Technology
Address:	102B Centennial Hall
Title:	SYSTEM ADMINISTRATOR-EXPERT
Phone:	(573) 341-6251
Email:	<a href="mailto:rhafter@mst.edu">rhafter@mst.edu</a>

Location and Description of Host	
Location:	No location set.
Description:	No description set.
New Location:	<input type="text"/>
New Description:	<input type="text" value="Win10 virtual machine on r99rhafter"/>
<input type="button" value="Update"/>	

Admin Comments for Host	
Admin Comments:	No admin comments set.
New Admin Comments:	<input type="text" value="CampusWin10"/> <input type="button" value="Update"/>

DHCP Host Options	
Extra DHCP options can be added to the host when specifically required. Regular desktop systems should not require any special options. Do not use this option unless directed by IT.	
<input type="text" value="PXE-CMDESK-PROD: PXE CMDesk - Production"/>	<input type="button" value="Add Additional Option"/>

Admin Host Options	
Extra admin options can be added to the host when specifically required. Regular desktop systems should not require any special options. This functionality is limited to security staff. Be sure and also lock the host if you are disabling it.	
<input type="text"/>	<input type="button" value="Add Additional Option"/>

Registered Ethernet Addresses	
<input type="text" value="00:50:56:3D:1C:A1"/>	<input type="button" value="Delete"/>
<input type="text"/>	<input type="button" value="Add New Address"/>
<a href="#">Automatically Allocate VMWare Ethernet Address</a>	

In the Admin comments, add **CampusWin10** build.

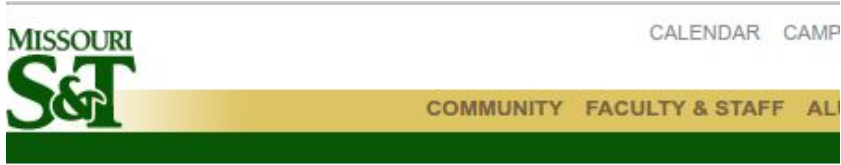
Under the DHCP options, select the **PXE-CMDESK-PROD: PXE CMDesk - Production** option. This will point the system to Desktop Infrastructures PXE server.

Once the NETDB registration is complete, it's time to build a software deployment template.



<https://itweb.mst.edu/auth-cgi-bin/cgiwrap/deskwtg/menu.pl>

Select the **Windows 10 x64 SCCM 2012 Install**

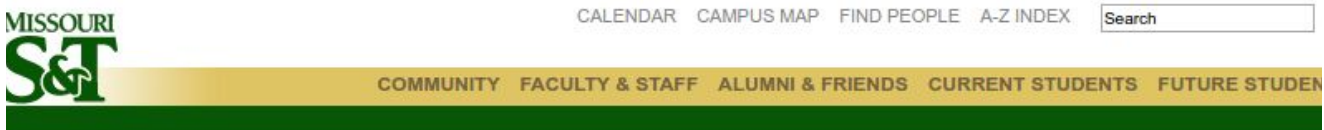


## Web Template Generator

Web Template Generator Applications

- [Windows 7 x64 SCCM 2012 Install](#)
- [Windows 10 x64 SCCM 2012 Install](#)
- [Browse Generated Templates](#)
- [Search Generated Templates](#)

On the next page, enter the computer name just registered in NETDB. Click Search



## Windows 10 x64 SCCM 2012 Install Web Template Generator

Search for Host

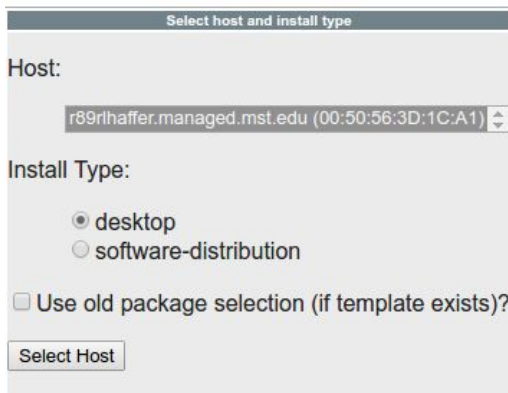
Example: r01joeminer.managed.mst.edu

Host Name:

On the next page, select Desktop as the install type.

Click **Select Host**

## Windows 10 x64 SCCM 2012 Install Web Template Generator



Select host and install type

Host:  
r89rlhaffer.managed.mst.edu (00:50:56:3D:1C:A1)

Install Type:

desktop  
 software-distribution

Use old package selection (if template exists)?

Select Host

On the next page, is the list of installable applications, but keep in mind, not everything is site licensed. Work with Asset Management to determine what is allowed.

Once selections are made on the template, click **Generate Template** at the bottom of the page.

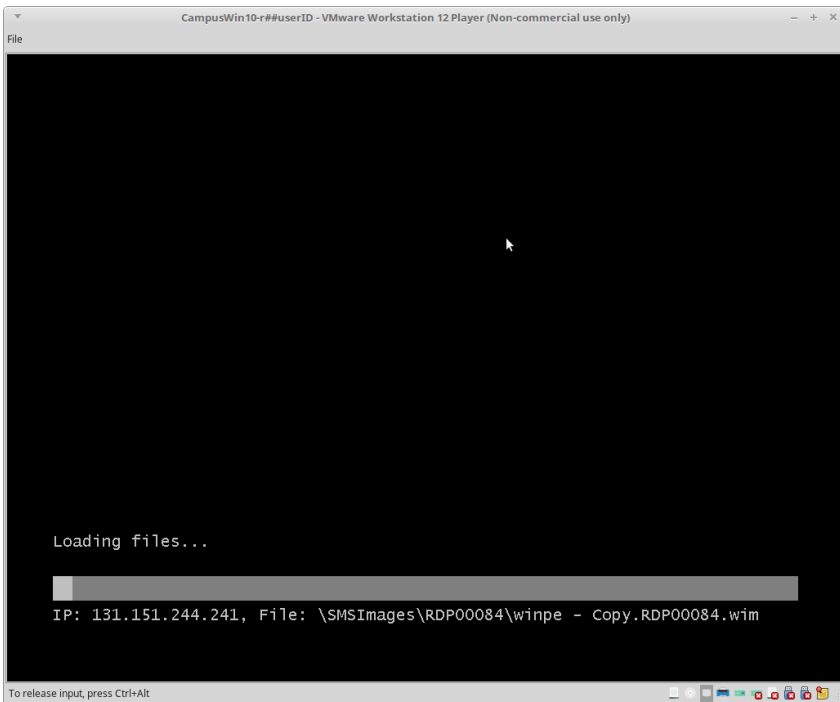
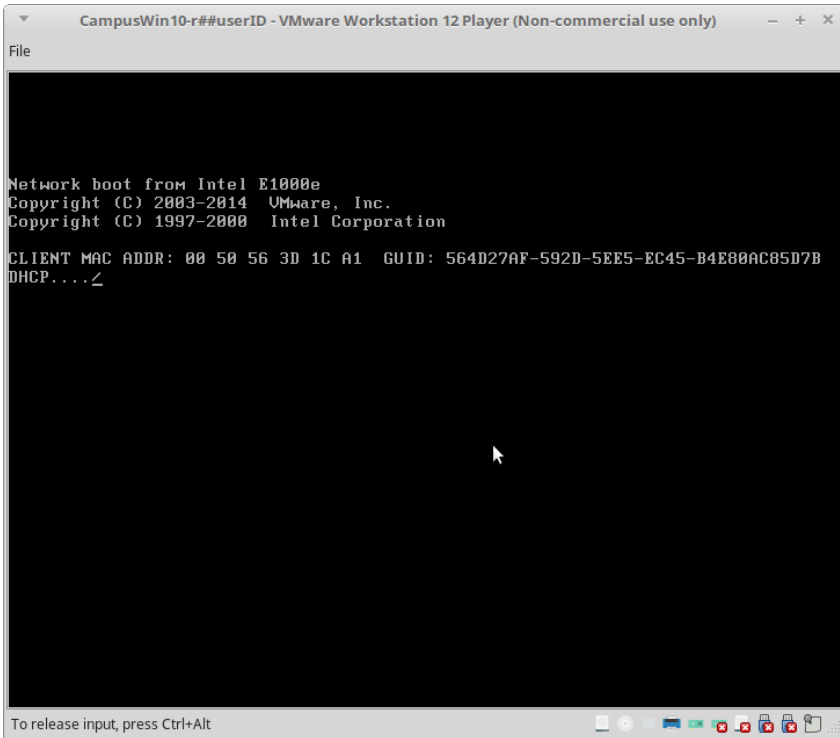
# Windows 10 x64 SCCM 2012 Install Web Template Generator

Template Parameters	
Option	Value
Host Name(s)	r89rlhaffer.managed.mst.edu
Install Type	desktop
Primary User/Owner E-Mail:	rlhaffer@mst.edu
Video Configuration	Resolution: 1920x1080
Mandatory Software	<input checked="" type="checkbox"/> Enable High Performance Profile <input checked="" type="checkbox"/> Join Domain <input checked="" type="checkbox"/> Install Options: (None) <input checked="" type="checkbox"/> VMware Tools: VMware Tools (ESXi 6.0) <input checked="" type="checkbox"/> Local Admin - Standard IT Groups <input checked="" type="checkbox"/> Local Admins - Extra Groups from WTG <input checked="" type="checkbox"/> MST Login Scripts (3.1)
Mandatory Software Manual Install Optional	<input checked="" type="checkbox"/> 7-Zip 9.20 <input checked="" type="checkbox"/> Adobe PDF Software: Adobe Acrobat DC 2015 <input checked="" type="checkbox"/> Base Image Override: (None) <input checked="" type="checkbox"/> Hardware Platform Documentation <input checked="" type="checkbox"/> Dell CCTK: Dell CCTK 2.1 <input checked="" type="checkbox"/> Flash Player 13.0.0.206 (autoupdate) <input checked="" type="checkbox"/> Firefox: Firefox (Standard, Autoupdating, + uBlock) <input checked="" type="checkbox"/> Set Firefox as Default Browser <input checked="" type="checkbox"/> Google Chrome <input checked="" type="checkbox"/> Java Runtime Environment: 1.8.0u92 <input checked="" type="checkbox"/> LAPS Client x64 <input checked="" type="checkbox"/> MST Customizations <input checked="" type="checkbox"/> Password Safe 3.36 <input checked="" type="checkbox"/> Pidgin IM Client 2.11.0 <input checked="" type="checkbox"/> Putty 0.65b <input checked="" type="checkbox"/> Shockwave Player 12.1.8.158 <input checked="" type="checkbox"/> TrueCrypt 7.1a <input checked="" type="checkbox"/> VLC Media Player: VLC 2.2.1 <input checked="" type="checkbox"/> WinSCP: WinSCP 5.7.7
	<input type="checkbox"/> Platform-Specific Packages: Surface Pro 3 - Drivers <input type="checkbox"/> [CLC] Local Admin for EdTech staff <input type="checkbox"/> VisSim 3.0 (FAP) <input type="checkbox"/> Abaqus 2016: Abaqus 2016 Teaching Install <input type="checkbox"/> Abaqus 6.12-3: Abaqus 6.12-3 (Teaching Licence) <input type="checkbox"/> Acis 3D R21 <input type="checkbox"/> ActiveSaver 1.01 (ECE) <input type="checkbox"/> Adobe CC Full Suite 2015 <input type="checkbox"/> Adobe Design Web: Adobe DesignWebBundle CC 2015 <input type="checkbox"/> Adobe Illustrator CC 2015 <input type="checkbox"/> Adobe InDesign CC 2015 <input type="checkbox"/> Adobe Photoshop CC 2015 <input type="checkbox"/> Adobe Premiere Pro: Adobe Premiere Pro CC 2015 <input type="checkbox"/> AggFlow 450.42 <input type="checkbox"/> Alice 3.1.93 <input type="checkbox"/> Altera ModelSim 12.0 <input type="checkbox"/> Altera Quartus II 12.0 <input type="checkbox"/> Android Studio 2.1.2 <input type="checkbox"/> ANSYS: Ansys 17.1 <input type="checkbox"/> Aquaveo SMS 11 (x64) <input type="checkbox"/> arcgis: ArcGIS 10.2 <input type="checkbox"/> Arena 14.0 <input type="checkbox"/> AspenONE: AspenONE 8.6 <input type="checkbox"/> Atom 1.8.0 <input type="checkbox"/> Audacity 2.1.0

## Creating Virtual Machines

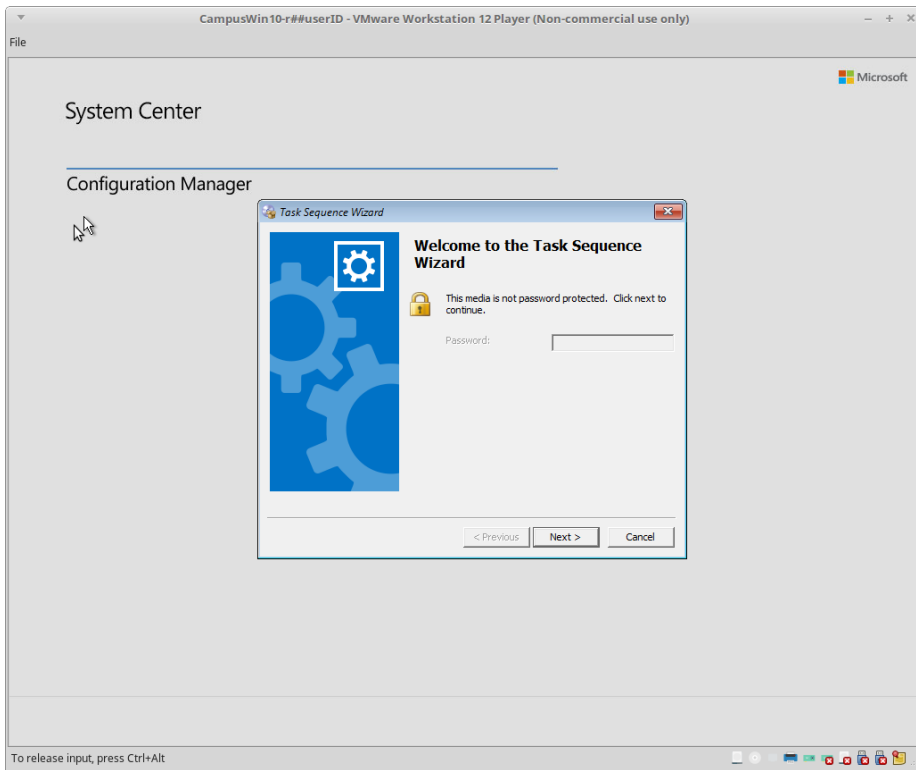
An email will be sent to the installer indicating a template was created for the desired computer.

Now that the template is created, Power up the virtual machine and wait until it connects to the PXE server and hit F12 to initiate the build.



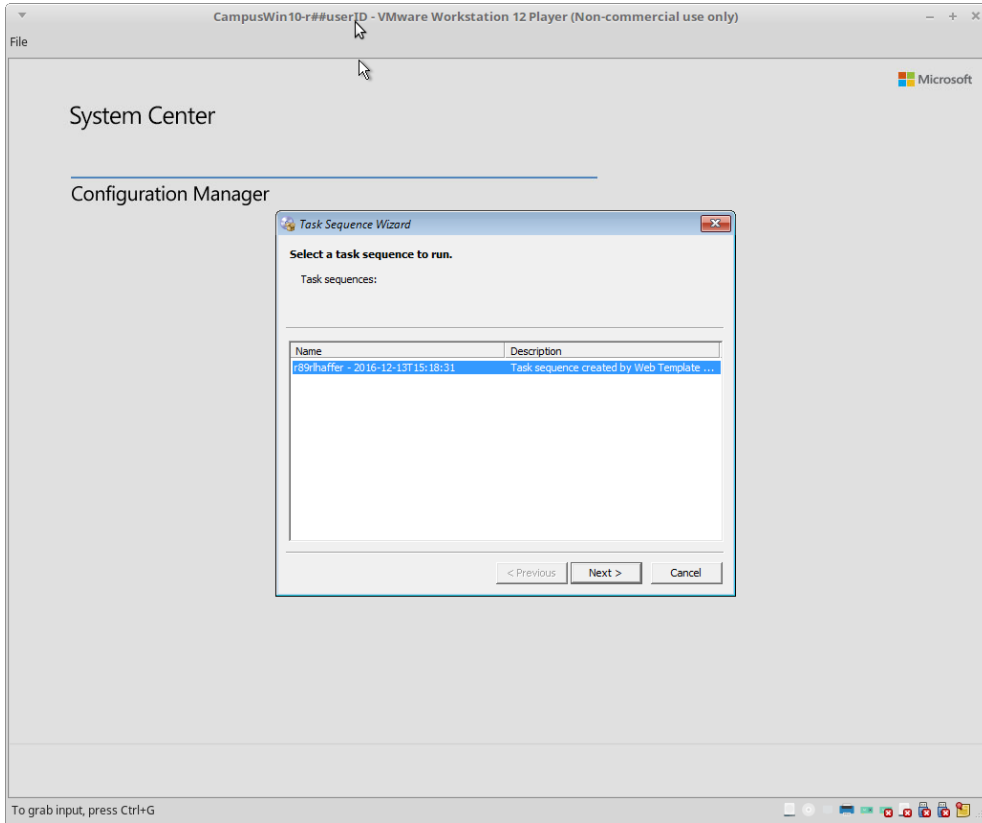
## Creating Virtual Machines

After it loads the .wim image file, it will sit on the Task Sequence screen, indicating there is a task (build) waiting to be deployed.



Click Next. On this screen, there will be a task indicated by the computer name given to the virtual machine, Click Next.

## Creating Virtual Machines



The system will begin to install the Windows image and go through many reboots. In around 2-4 hours, the Windows installation will be complete and ready to login.

# Creating Virtual Machines

