# How to Create Virtual Machines in VMWare Workstation Pro

## Reference Video:

ACTIVE DIRECTORY #00 Creating our Server + Workstation Virtual Environment

<https://www.youtube.com/watch?v=pKtDQtsubio&list=PL1H1sBF1VAKVoU6Q2u7BBGPsnkn-rajlp>

## Requirements:

* VMWare Workstation Pro
  + Current version = 16
  + Link: <https://www.vmware.com/products/workstation-pro.html>
* Note: VMWare Player will not work due to lack of support for:
  + Snapshots
  + Linked Clones
  + macOS 10.16 and greater hosts systems

## Get Started:

1. **Download VVware Workstation Pro**
2. **Download the ISO Files for:**
   1. Windows Server (2022, 2019, 2016)
      1. WS 2022 - <https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2022>
   2. Windows Workstation (Win 11 or Win 10)
      1. Win 11 - <https://www.microsoft.com/software-download/windows11>
3. **Create VM for a Server**
   1. Notes:
      1. Will be the server template
      2. First server deployed will be made into Domain Controller
   2. Name: Base Win Server 2022
   3. Use Windows Server ISO
      1. Mount to CD Drive
   4. Choose processor and RAM configuration
   5. Install Windows Server Standard Evaluation for Server Core
   6. Setup and note the Admin Password
      1. P@ssword123
   7. Once installed, check logging in with the admin password
   8. Optional:
      1. Stop SConfig from auto launching at startup
         1. SConfig Option 15 - “Exit to command line (PowerShell)”
         2. Command: Set- SConfig –AutoLaunch $false
   9. Restart the server from the command line
      1. shutdown /r /t 0
   10. Once restarted, use VMWare right click menu 🡪 Power 🡪 Shut Down Guest
   11. Create snapshot
       1. Snapshot 🡪 Take Snapshot
       2. Name = “Fresh Install”
   12. Enable Template Mode
       1. Manage 🡪 Options 🡪 Advanced 🡪 select “Enable Template Mode (to be used for cloning)”
   13. To create clones or duplicate servers
       1. Manage 🡪 Clone 🡪 An existing snapshot (powered off only) 🡪 select the snapshot “Fresh Install” 🡪 Create a linked clone 🡪 Select a name “[insert name here]”
4. **Create VM for a Workstation**
   1. Note: Will be the workstation template
   2. Name: Base Workstation 11
   3. Use Windows Workstation ISO
      1. Mount to CD Drive
   4. Choose processor and RAM configuration
   5. Handling Missing TPM Requirement
      1. If you receive the following messaging while installing the VM, use the steps below: “This PC does not meet the system requirement”
      2. You do not need to wait for the error message and you can hit “Shift +F10” during the install process.
      3. Instructions to edit registry here - <https://winbuzzer.com/2021/10/07/how-to-install-windows-11-without-tpm-2-xcxwbt/>
         1. Note: Do not reboot as it will revert the settings
   6. After configuring the Registry, back out of the setup and allow the setup to continue
      1. Do not reboot
   7. When the system restarts after confirming install, begin the get started process
      1. Create a local account
         1. Sign in options 🡪 Domain joined account
         2. Name = Local\_admin
         3. Password = P@ssw0rd
      2. Click next through the remaining options or makes selections as needed.
   8. When the get started process completes, you will be on the Windows desktop screen
   9. Right Click VMWare Menu 🡪 Install VMWare Tools
      1. Allow restart request to complete the installation
   10. Test logging in with the local\_admin account and password
   11. Open a command prompt
       1. Check the user reflected in the prompt is the local\_admin
       2. Use command ”net users” to see the local\_admin account in the list
   12. Shutdown the computer
   13. Create a snapshot
       1. Snapshot 🡪 Take Snapshow
       2. Name 🡪 Fresh Install (VMWare Tools)
   14. Enable Template Mode
       1. Manage 🡪 Options 🡪 Advanced 🡪 select Enable Template Mode (to be used for cloning)
   15. To create clones or duplicate servers
       1. Manage 🡪 Clone 🡪 An existing snapshot (powered off only) 🡪 select the snapshot “Fresh Install (VMWare Tools)” 🡪 Create a linked clone 🡪 Select a name “[Insert name here]”