

# How to Create Virtual Machines in VMWare Workstation Pro

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## Reference Video:

ACTIVE DIRECTORY #00 Creating our Server + Workstation Virtual Environment by John Hammond

<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 and Install VMWare Workstation Pro
2. Download the ISO Files for:
  - a. Windows Server (2022, 2019, 2016)
    - i. WS 2022 - <https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-2022>
  - b. Windows Workstation (Win 11 or Win 10)
    - i. Win 11 - <https://www.microsoft.com/software-download/windows11>
3. Create VM for a Server
  - a. Notes:
    - i. Will be the server template
    - ii. First server deployed will be made into Domain Controller
  - b. Name: Base Win Server 2022
  - c. Use Windows Server ISO
    - i. Mount to CD Drive
  - d. Choose processor and RAM configuration
  - e. Install Windows Server Standard Evaluation for Server Core

- f. Setup and note the Admin Password
  - i. P@ssword123
- g. Once Windows is installed, check logging in with the admin password
- h. Optional:
  - i. Stop SConfig from auto launching at startup
    - a. Within Sconfig → Select SConfig Option “15” = Exit to command line (PowerShell)
    - b. PowerShell Command → Set- SConfig –AutoLaunch \$false
- i. Restart the server from the command line
  - i. shutdown /r /t 0
- j. Once restarted, use VMWare right click menu → Power → Shut Down Guest
- k. Create snapshot
  - i. Snapshot → Take Snapshot
  - ii. Name = “Fresh Install”
- l. Enable Template Mode
  - i. Manage → Options → Advanced → select “Enable Template Mode (to be used for cloning)”
- m. To create clones or duplicate servers
  - i. Select a VM in VMWare → 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

- a. Note: Will be the workstation template
- b. Name: Base Workstation 11
- c. Use Windows Workstation ISO
  - i. Mount to CD Drive
- d. Choose processor and RAM configuration
- e. Handling Missing TPM Requirement
  - i. If you receive the following messaging while installing the VM, use the steps below: “This PC does not meet the system requirement”
  - ii. You do not need to wait for the error message and you can hit “Shift +F10” during the install process.
  - iii. Instructions to edit registry here - <https://winbuzzer.com/2021/10/07/how-to-install-windows-11-without-tpm-2-xcxwbt/>
    - a. Note: Do not reboot as it will revert the settings
- f. After configuring the Registry, back out of the setup (left arrow) and allow the setup to continue
- g. When the system restarts after confirming install, begin the Get Started process
  - i. Create a local account
    - a. Select “Sign in options” → Domain joined account
    - b. Name = Local\_admin
    - c. Password = P@ssw0rd
  - ii. Click next through the remaining options or makes selections as needed.
- h. When the Get Started process completes, you will be on the Windows desktop screen
- i. Right Click VMWare Host Menu → Install VMWare Tools

- i. Allow restart request to complete the installation
- j. Test logging in with the local\_admin account and password
- k. Open a command prompt
  - i. Check the user reflected in the prompt is the local\_admin
  - ii. Terminal Command → net users
    - a. Check to see the local\_admin account in the list
- l. Shutdown the computer
- m. Create a snapshot
  - i. Snapshot → Take Snapshot
  - ii. Name → Fresh Install (VMWare Tools)
- n. Enable Template Mode
  - i. Manage → Options → Advanced → select Enable Template Mode (to be used for cloning)
- o. Note: To create clones or duplicate workstations
  - i. Select a VM in VMWare → 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]"