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Download and Install Virtual Box

1. The first step is to download and install VirtualBox. This is the software that will host your windows server in an isolated environment. Click on the button to download the latest version of VirtualBox.

2. Select the operating system you are running.

3. Install the software.

Download Windows Server Virtual Machine Image

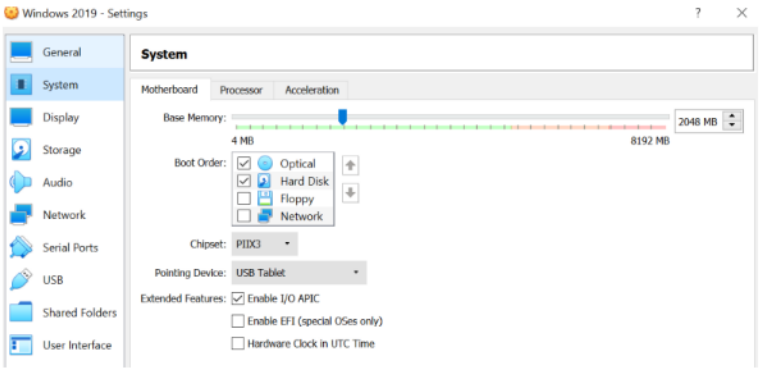
Next, you will download Windows Server 2019 Evaluation ISO image from Microsoft.

1. To download the ISO image, go to: https://www.microsoft.com/en-US/evalcenter/evaluate-windows-server-2019. This will take several minutes to download depending on your internet speed.

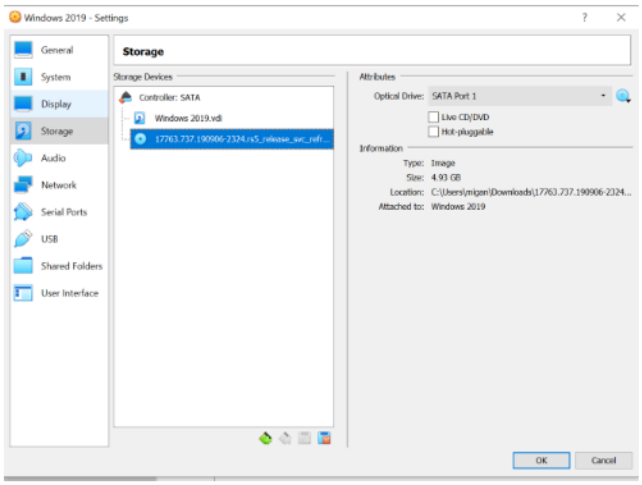
    a. Link to download Oracle VirtualBox: Click Here

VirtualBox Configurations

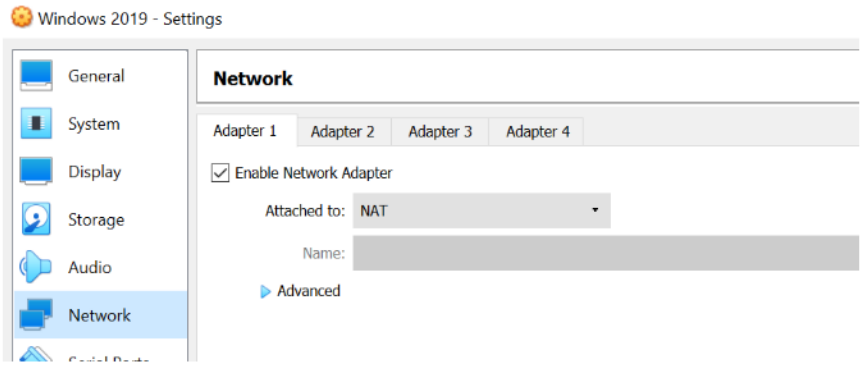
1. Open VirtualBox and create a "new" Machine. Fill in the required fields.
    - **Name**: You can name your machine something appropriate.
    - **Machine Folder:** You may leave this as default, or choose a different path to save your virtual machine.
    - **Type**: Microsoft Windows
    - **Version:** Windows 2019
2. To configure your settings, highlight the machine you recently created and click "Settings". Go through the below tabs and make ensure you have the following:
    - System
        - Base memory = 2048MB (Minimum)
        - Boot Order = "Optical" to the top



    - Storage
        - Under "Storage Devices", click on the CD icon.
        - Under "Attributes" section, click on the CD icon, and click on "choose disk file". Select the Windows Server ISO you have downloaded in the previous steps.


Windows 2019 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 2019.vdi
17763.737.190906-2324.rs5_release_svc_refr...
Attributes
Optical Drive:
SATA Port 1
Live CD/DVD
Hot-pluggable
Information
Type:
Image
Size:
4.93 GB
Location:
C:\Users\mjzan\Downloads\17763.737.190906-2324...
Attached to:
Windows 2019
OK
Cancel

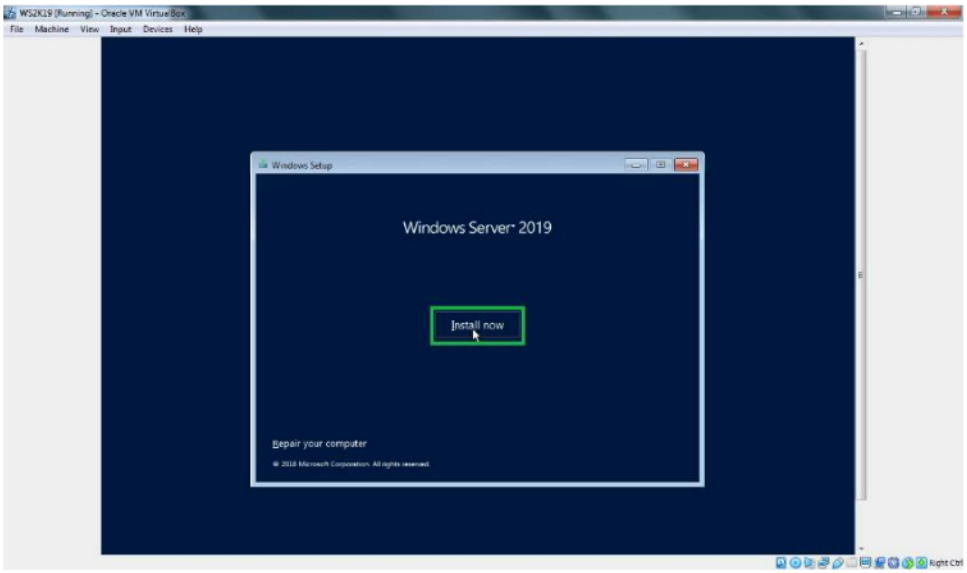
- Network
    - Adapter 1 is “Enabled” and attached to “NAT”.



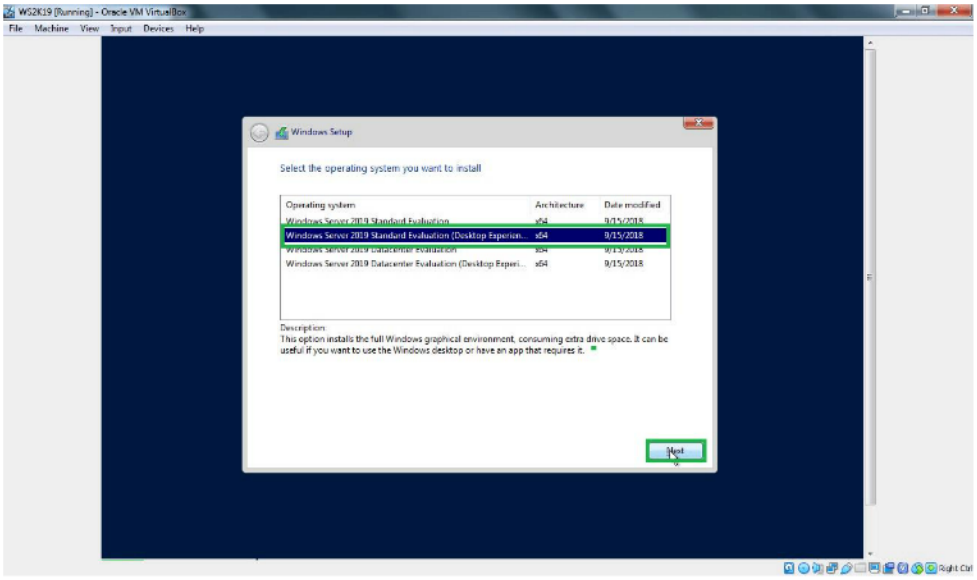
OS Install in Virtual Server

Double click your virtual machine to turn it on. It will automatically boot up to the ISO image you mounted in the previous steps.

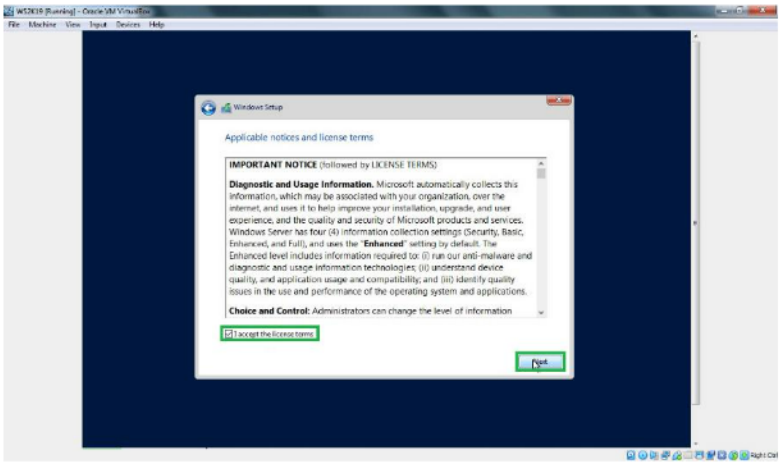
1. On the Windows Setup console, select:
    a. Language
    b. Time and currency format
    c. Keyboard layout
2. Click on **Install Now** to start installation.



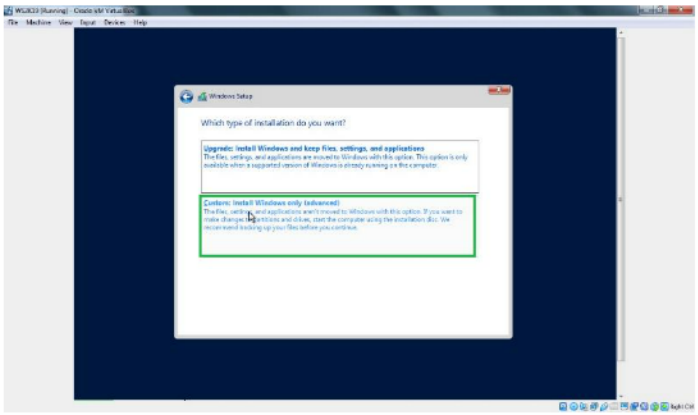
3. Select Windows Server 2019 Standard Evaluation (Desktop Experience).



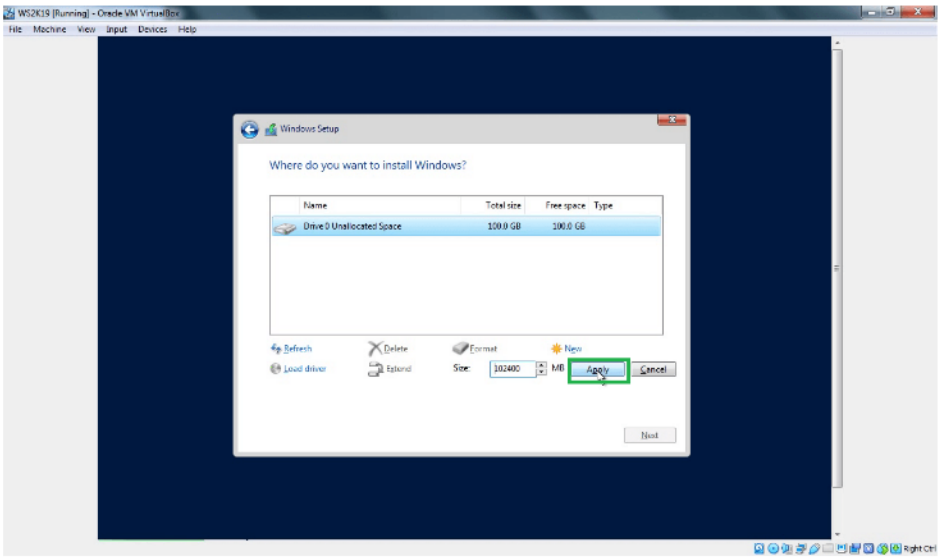
4. Accept the license terms and click next.



5. Select Custom
    a. Create "New" to create a new partition to install Windows server 2019.

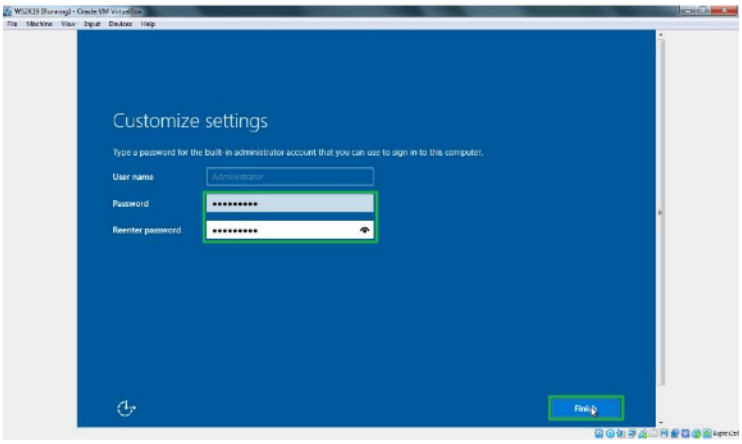


6. In this section, you may select “Drive 0”, or click on “New” to create a separate partition. If you have selected to partition the hard drive, select “Apply”, then “Next”.



The installation will then start and may take several minutes to complete. Once the installation is complete, the server will restart automatically.

7. After the restart, you will be prompted to the below screen. Setting the password for the Administrator account should be treated with the upmost importance. Unauthorized personnel that gain access to this account will be able to take full control of your system.
    a. Set your Administrator password.



8. Once this step is done, you will be ready to log on to your windows server.

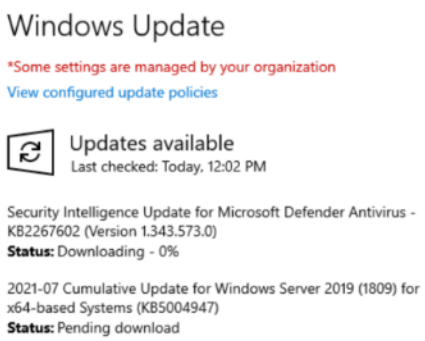
Hardening Server

Once you are logged into the server, we will start performing some basic hardening.

Run Windows Update

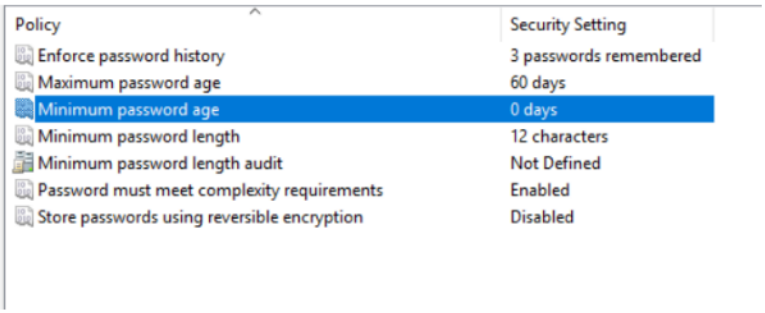
Running a Windows Update should be one of your first steps you should do to ensure maximum protection. To run a windows update, simply select the start menu, and type “windows update”.

Select Windows Update and click on “Search for Updates”. If your system is out of date, you will be prompted to install the necessary files to have your system fully updated.

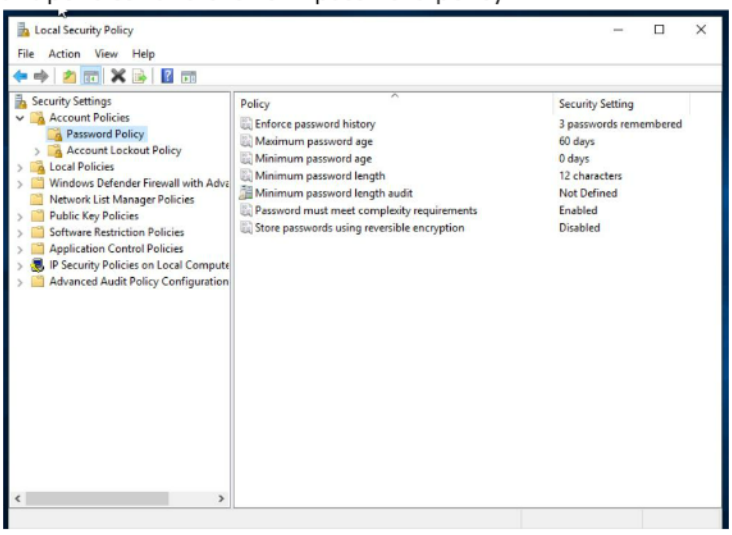


Update Password Policy

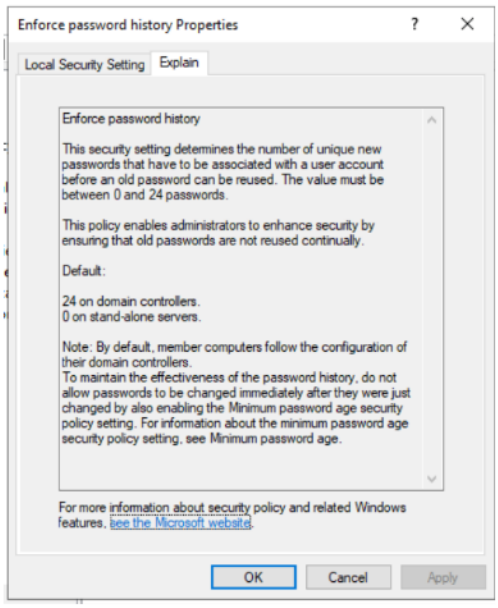
Update the server’s local password policy to the below.



1. Go to start menu and type “local security policy”.
2. Expand “account policies” and click on “password policy”.



3. Double click “Enforce password history” and enter the new value of “3”. Click ok to apply changes.
    a. Note: After double clicking the field of choice, you can select the “Explain” tab for a description on the field you are modifying.



4. Repeat step 3 for the other fields mentioned above. Be sure to review the “Explain” section for each field you are modifying.

Submit Results

Take a screenshot of your local security policy and upload the results. Congratulations on completing this task!