HOMELAND HOSPITALITY HOLDING COMPANY

WE PUT THE ”HO” IN HOSPITALITY SITES AROUND THE WORLD!

VOLUME 1

A HO HO HO COMPANY SERVER PROJECT

CREATION AND IMPLEMENTATION OF A WINDOWS 2019 SERVER

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INTRODUCTION

CHAPTER 1

This manual serves as a comprehensive resource, strategically designed to assist users in the accurate replication of the Windows Server based off the memo sent by the HOHOHO company. Offering detailed insights into system requirements, installation procedures, and configuration settings, it equips users with the necessary guidance to recreate a mirror image of the specified Windows Server environment. By addressinGg crucial aspects such as troubleshooting and best practices this guide ensures a seamless and efficient replication process, facilitating users in successfully establishing a consistent Windows Server setup tailored to their specific needs.

WHAT THIS MANUAL WILL TEACH THOSE WHO READ IT

By the end of the manual, users will be able to understand and create the following in a Windows Server

Creating an Active Domain

Creating a File Server

Creating a Print Server and adding Printers

Creation of Users and Groups

File Security

ASPECTS OF THE SERVER

With over 30 users and 20 departments, and plenty of room for more, this Windows Server is a swiss army knife of a server is An Active Directory, Web, File, and Printer server all in one setting. With large amounts of users comes the need for tight security when it comes to file and document protection, and this server has it. Each user and their departments, from the cle staff to the IT department to the CEO themselves, have their own unique permissions to access their files and their files only server hosts its own webpage for the employees to be able to easily access important links. This server also gives each employee the ability to print documentation off by giving them access to 2 printers in the building.

INSTALLING SOFTWARE

CHAPTER 2

IN THIS SECTION, YOU WILL LEARN HOW TO INSTALL THE WINDOWS SEVER 2019 ISO IMAGE FROM THE MICROSOFT WEBSITE AND THE ORACLE VM VIRTUAL BOX INSTALLATION WIZARD FROM THE VIRTUAL BOX WEBSITE.

INSTALLING VIRTUAL BOX

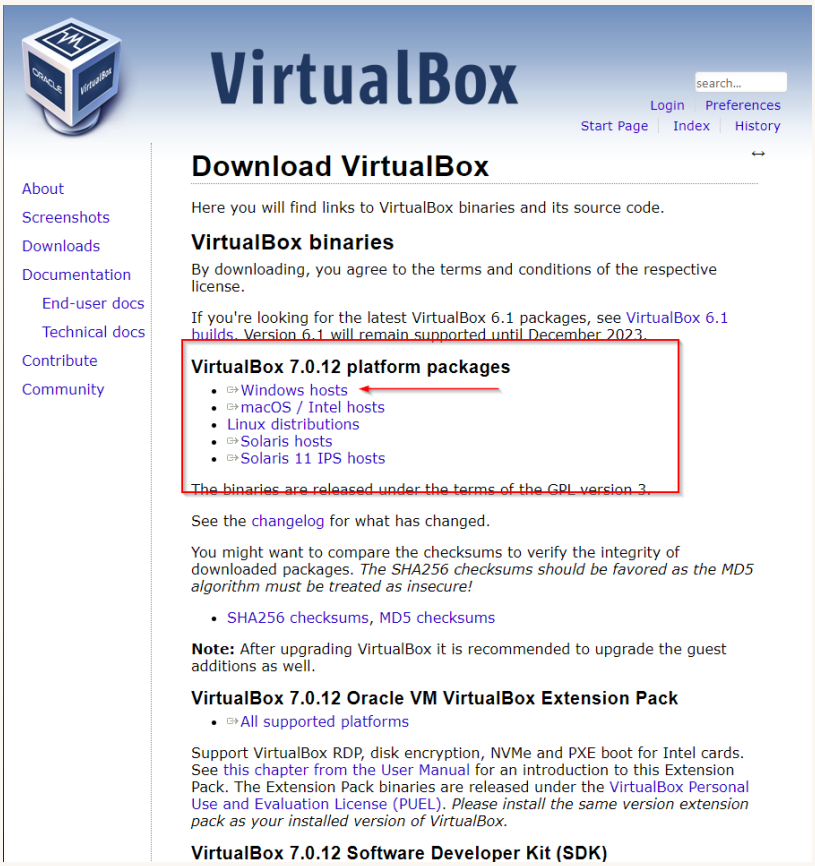
There are many virtual machine software that can be used to run the windows server 2019 ISO image such as VMWare, Virtual Box, Hypervisor, and Xen Project. This manual will be using Oracle's Virtual Box to create and host the virtual server.

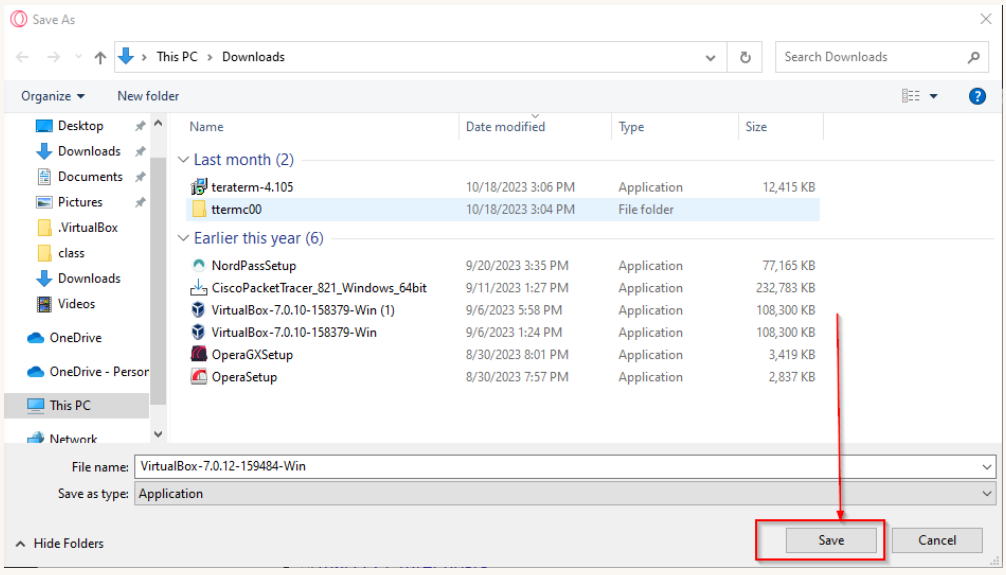
STEP 1

Go to your choice of internet browser Google, Bing, Firefox and in the search bar go to the Virtual Box website which is at www.virtualbox.org. Once on the website, on the left side click on the Downloads page link.

STEP 2

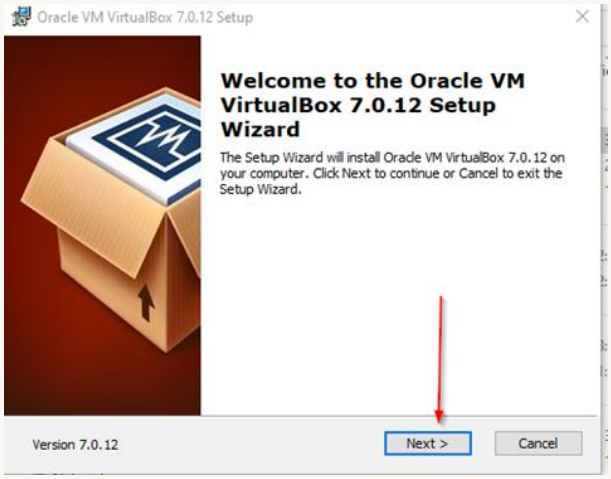
ONCE ON THE DOWNLOAD PAGE CLICK ON THE DOWNLOAD LINK FOR YOUR SPECIFIC OPERATING SYSTEM UNDER THE MOST RECENT VERSION OF VIRTUAL BOX, AS OF NOVEMBER 2023 THE CURRENT AND UP TO DATE VERSION IS VIRTUAL BOX 7.0.12. A POPUP WILL APPEAR ASKING WHERE TO DOWNLOAD THE INSTALLER, CHOOSE WHERE YOU WANT TO INSTALL IT, ONCE A LOCATION IS PICK CLICK SAVE.



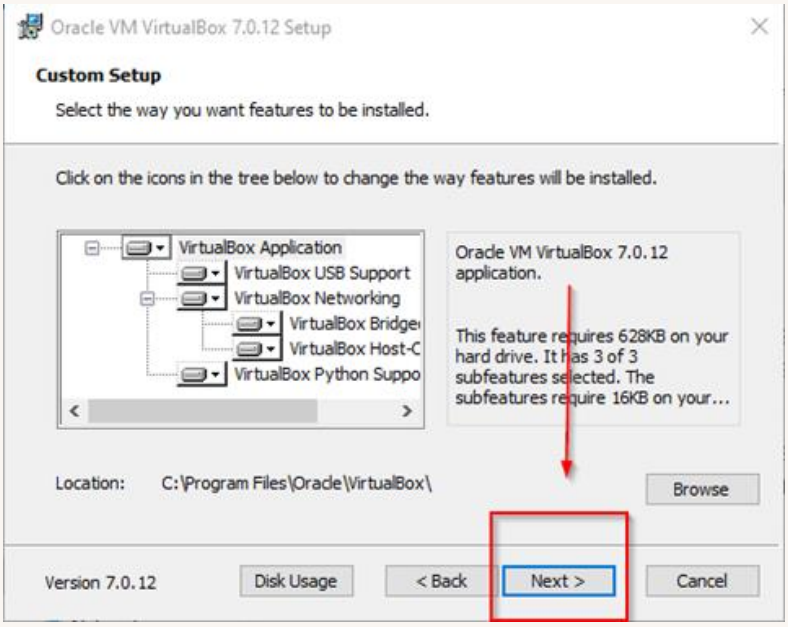


STEP 3

ONCE THE INSTALLATION WIZARD HAS FULLY INSTALLED, DOUBLE CLICK ON THE PORGRAM TO START THE INSTALLATION PROCESS. A POP UP WILL APPEAR AND THE FIRST STAGE OF THE PROCESS IS THE WELCOME STAGE, ALL YOU NEED TO DO HERE IS CLICK NEXT.



THE SECOND STAGE IS THE CUSTOM SETUP FOR THE VIRTUAL BOX FEATURES TO BE INSTALLED. UNLESS YOU ARE KNOWLEDGABLE WITH VIRTUALBOX IT IS BEST TO JUST CLICK NEXT

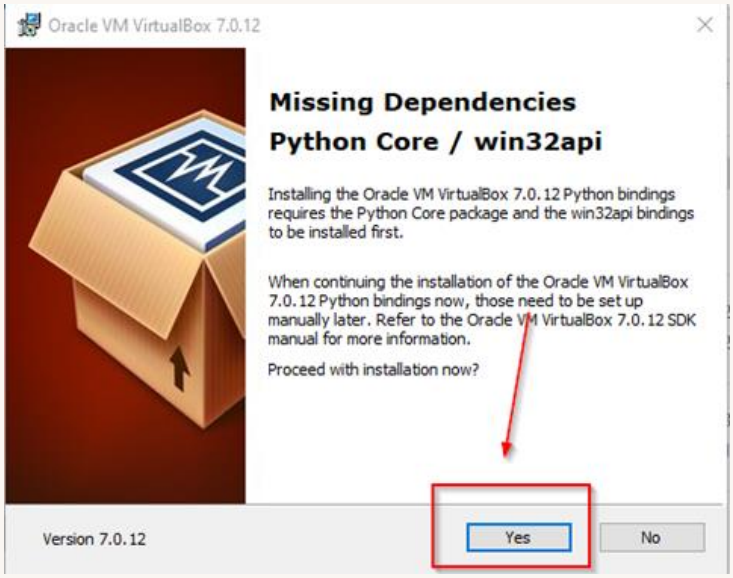


STEP 3

CONTINUED

THE THIRD STAGE IS A WARNING THAT THE COMPUTTER WILL LOSE INTERNET CONNECTION FOR A SHORT PERIOD OF TIME. MAKE SURE THAT BEFORE CLICKING YES THAT ANY SENSTIVE PROGRAMS THAT RELY ON A CONSTANT INTERNET CONNECTION ARE SAVED AND BACKED UP. WHEN READY CLICK YES TO CONTINUE.

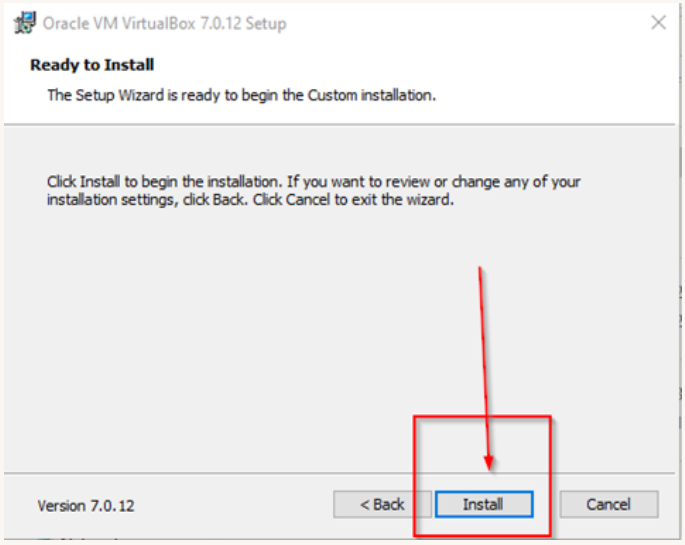
THE FOURTH STAGE IS A WARNING THAT THIS INSTALLATION DOES NOT INCLUDE PYTHON CORE/WIN32 API. THIS SERVER DOES NOT REQUIRE THIS, TO CONTINUE CLICK YES.



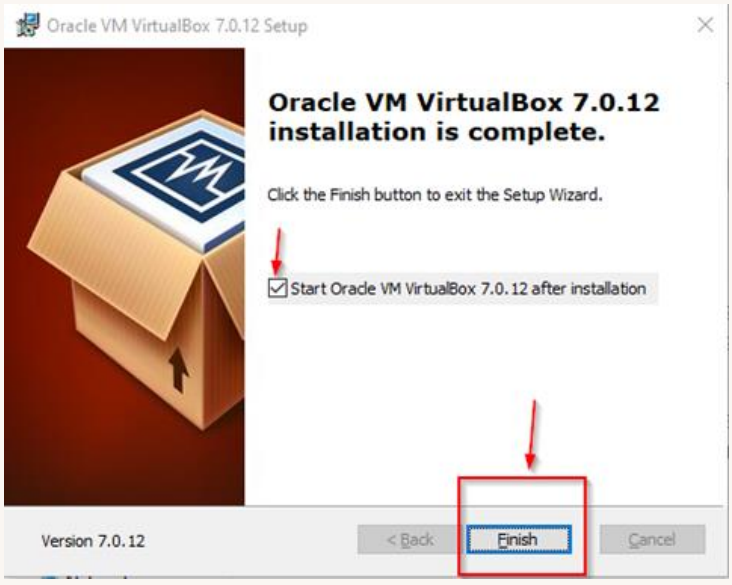
STEP 3

CONTINUED

THE FINAL STAGE IS THE END STAGE AND WILL START THE ACTUAL INSTALLATION OF VIRTUAL BOX. CLICK INSTALL WHEN READY FOR THE INSTALL.



ONCE THE INSTALLATION IS COMPLETE ANOTHER POP UP WILL APPEAR STATING THAT THE INSTALLATION WAS A SUCCESS. LEAVE THE CHECKBOX CHECKED AND CLICK THE FINISH BUTTON WHICH SHOULD OPEN VIRTUALBOX



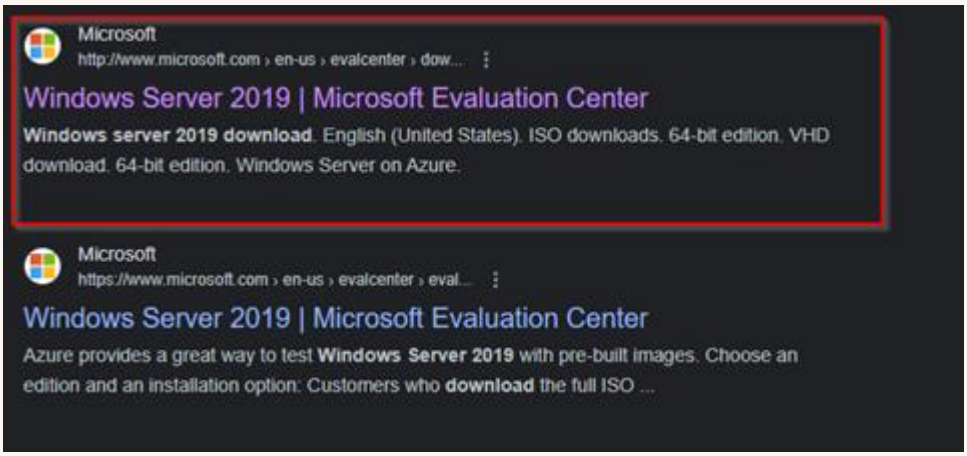
CONGRATULATIONS YOU HAVE SUCCESSFULLY DOWNLOADED AND INSTALLED ORACLE'S VM VIRTUAL BOX. THE NEXT STEP IS TO FIND AND DOWNLOAD A SERVER OS ISO FILE.

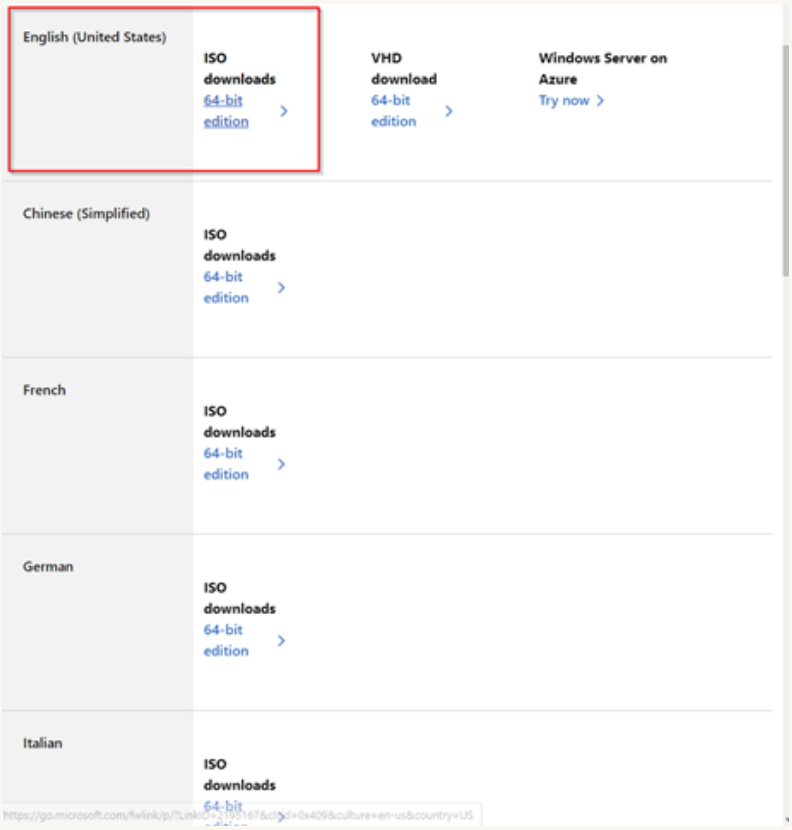
DOWNLOADING THE ISO IMAGE

THERE ARE MANY DIFFERENT TYPES OF OPERATING SYSTEMS FOR SERVERS THAT YOU CAN USE WITH THE MAJOR ONES BEING LINUX WINDOWS, UNIX, AND CLOUD BASED SERVERS THAT ARE HOSTED BY THIRD PARTY COMPANIES SUCH AS AMAZON AWS, GOOGLE, OR MICROSOFT AZURE. THIS SERVER IS CURRENTLY RUNNING ON WINDOWS SERVER 2019 BY MICROSOFT.

STEP 1

TO FIND THE ISO IMAGE FILE FOR WINDOWS SERVER 2019, USE ANY SEARCH ENGINE AND SEARCH FOR WINDOWS SERVER 2019 DOWNLOAD AND CLICK THE LINK THAT WILL TAKE YOU TO MICROSOFT'S EVAULATION CENTER.





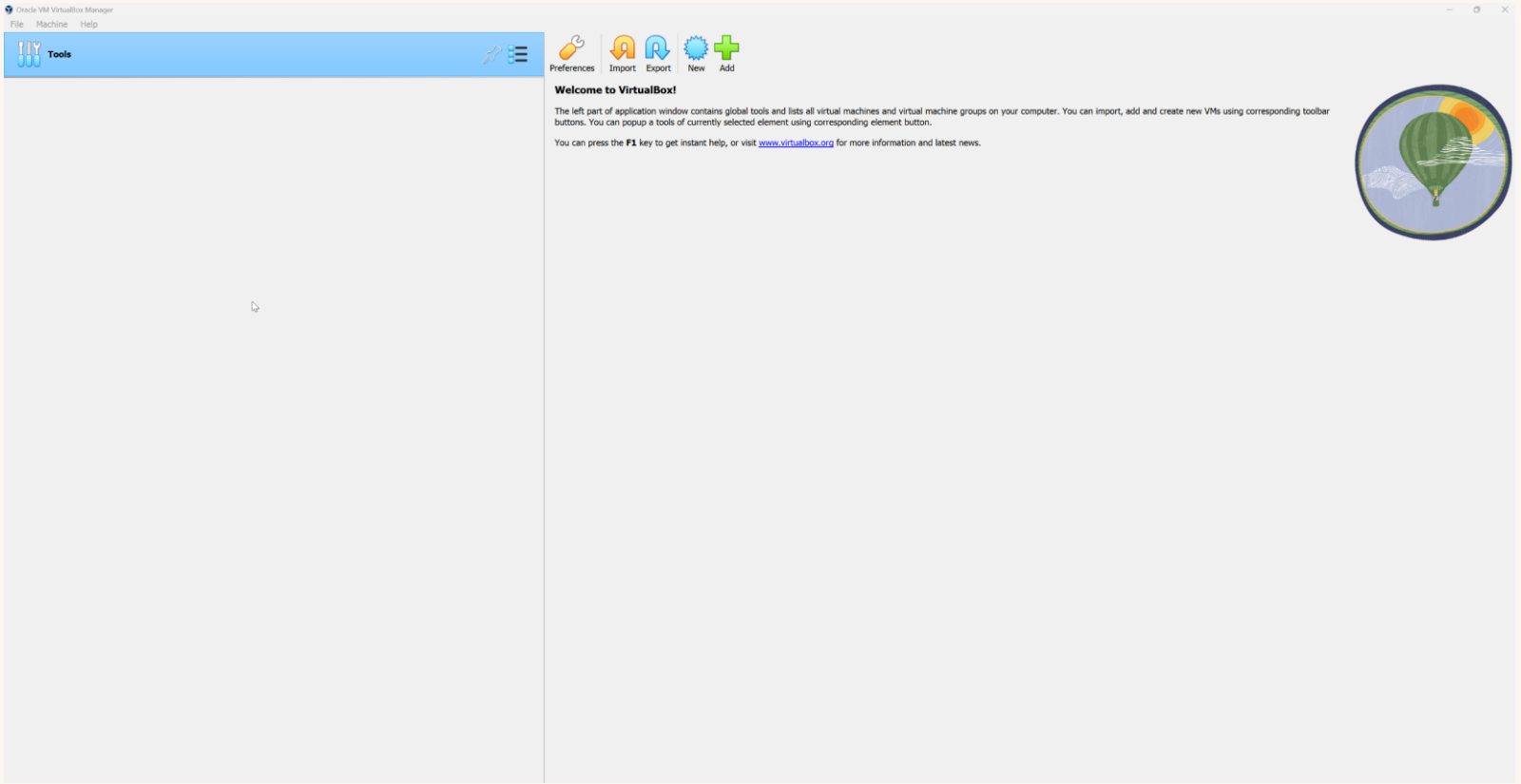
ONCE IN THE EVALUATION CENTER CLICK ON THE ISO DOWNLOAD LINK FOR THE SPECIFIC LANGUAGE THAT IS NEEDED. THIS SERVER NEEDS TO BE IN ENGLISH, SO CLICK ON THE ISO DOWNLOAD 64-BIT EDITION LINK THAT IS LISTED IN THE ENGLISH OPTIONS. THE DOWNLOAD WILL TAKE A BIT TO DOWNLOAD.

STEP 2

ONCE THE ISO IMAGE HAS FULLY DOWNLOADED IT IS RECOMMENDED THAT THE USER MOVE THE DOWNLOADED FILE SOMEWHERE EASILY AND QUICKLY ACCESSIBLE FOR LATER USE

CONGRATULATIONS, YOU HAVE SUCCESSFULLY DOWNLOAD AND INSTALLED ALL NECESSARY SOFTWARE NEEDED TO CREATE THE SERVER.

IN THE NEXT CHAPTER, THE CREATION OF THE VIRTUAL MACHINE IS NEXT.



CREATION OF THE VIRTUAL MACHINE

CHAPTER 3

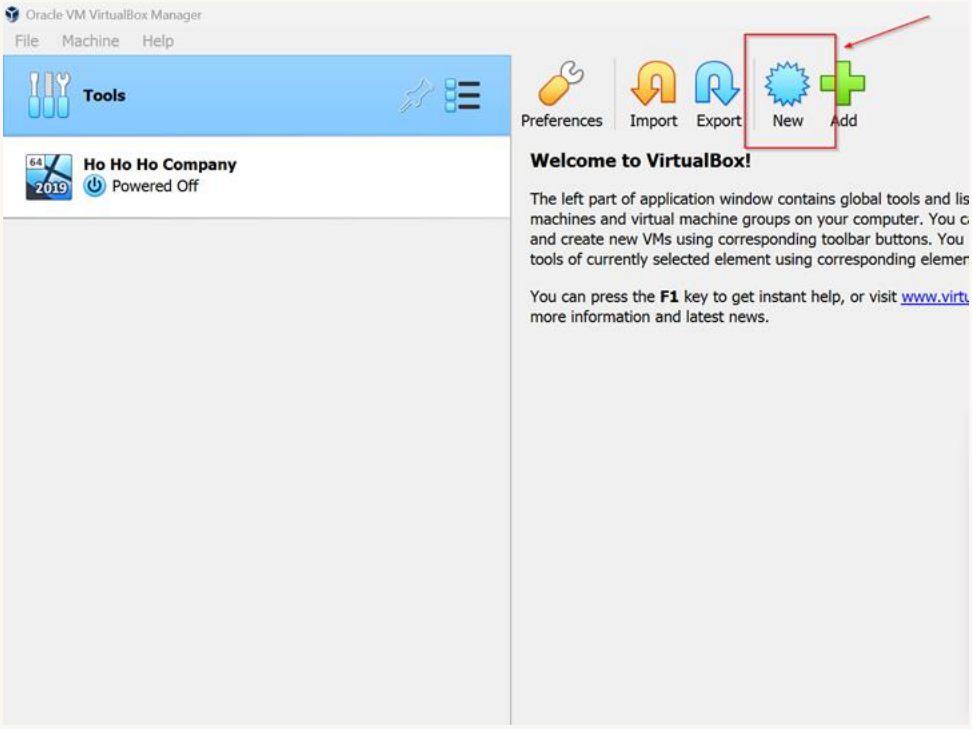
IN THIS CHAPTER THE USER WILL LEARN HOW TO CREATE A VIRTUAL MACHINE WITH THE SPECIFICATIONS TO RUN WINDOWS SERVER 2019 WITH NO ISSUES.

T OPEN UP VIRTUALBOX'S VIRTUAL STAR THAT SAYS NEW. IF THE US

STEP 1

W VIRTUAL MACHINE CLICK ON THE VIRTUAL MACHINE THEN CLICK ADD

AND ADD IT THROUGH THERE.



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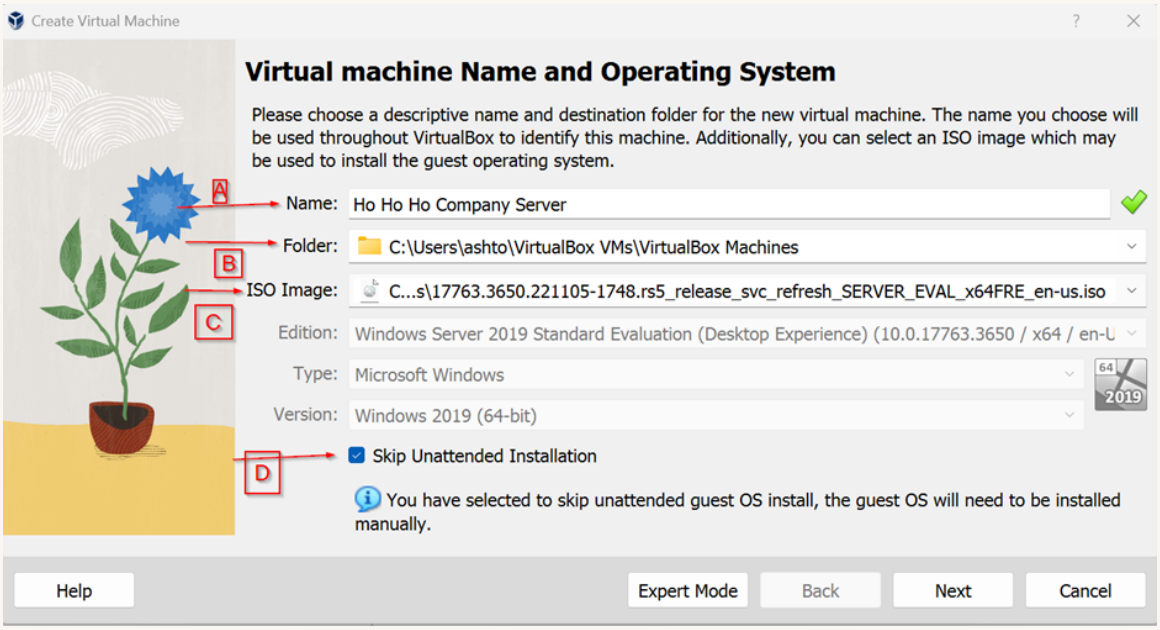
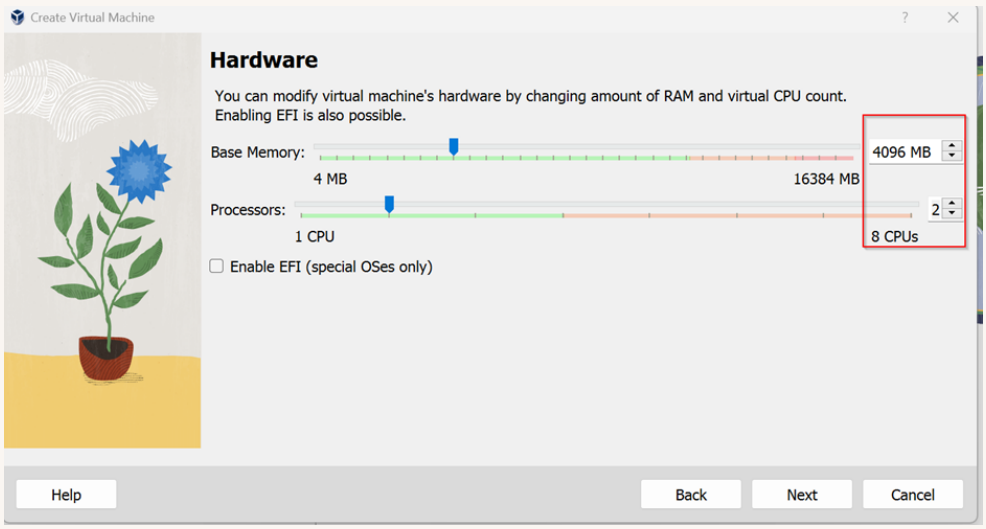
STEP 2

THE FIRST STAGE OF THE CREATION IS (A) NAMING OF THE VIRTUAL MACHINE, WHICH THE MEMO REQUEST THAT IT BE NAMED HO HO HO COMPANY SERVER. AFTER THE NAMING, (B) THE SAVE LOCATION MUST BE SET FOR THE VIRTUAL MACHINE AND TO DO THAT CLICK THEDROP DOWN MENU, CLICK OTHER, AND CREATE A FILE FOR IT TO BE STORE IN THEN SELECT SAVE. (C)THE ISO IMAGE MUST NOW BE SELECTED, SO WHERE IT WAS SAVED IN THE PREVIOUS CHAPTER, GO AND SELECTED IT FROM THERE. (D) THE FINAL PART IS CHECKING THE SKIP UNATTENDED INSTALLATION AND BY DOING THIS IT, ALLOWS THE USER TO SET THE FEATURES THEY WANT FOR THE SERVER. CLICK NEXT TO CONTINUE.

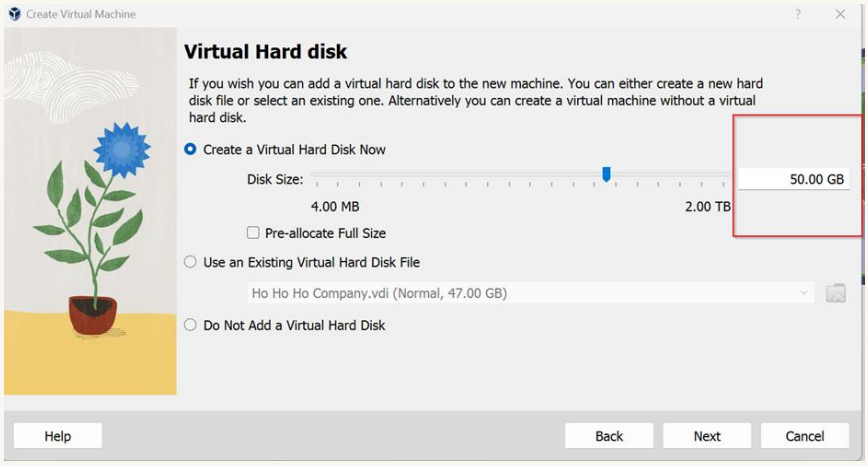


THE FIRST SECOND STAGE IS THE HARDWARE SETUP, ON THIS PAGE THE USER WILL SET UP THE AMOUNT OF BASE MEMORY AND PROCESSORS FOR THE SERVER. IT IS HIGHLY RECOMMENDED THAT TO AVOID PERFORMANCE ISSUES TO STAY WITHIN THE GREEN WHEN SELECTING VALUES. THIS SERVER WILL BE RUNNING ON 4096MB OR 4GB AND 2 PROCESSORS. CLICK NEXT TO CONTINUE.

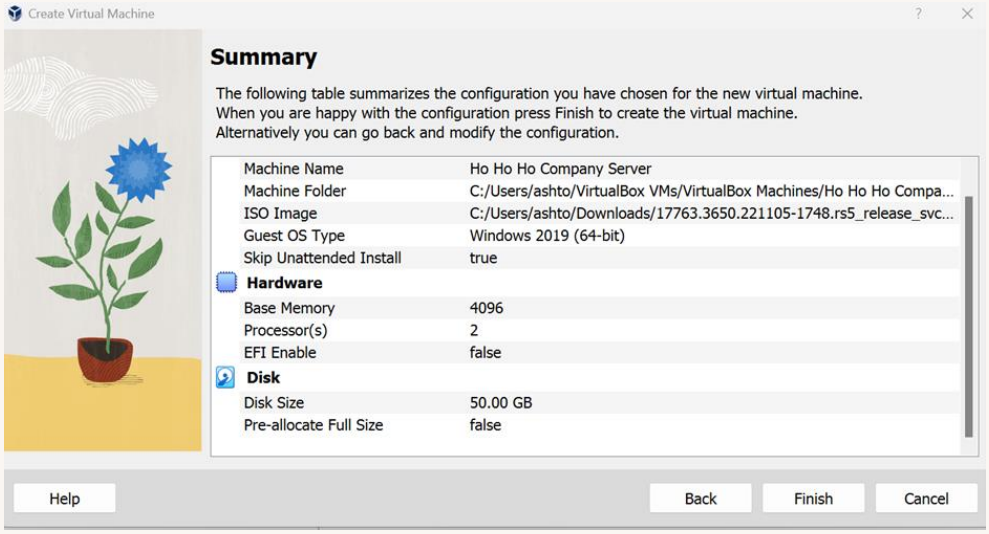


STEP 2 CONTINUED

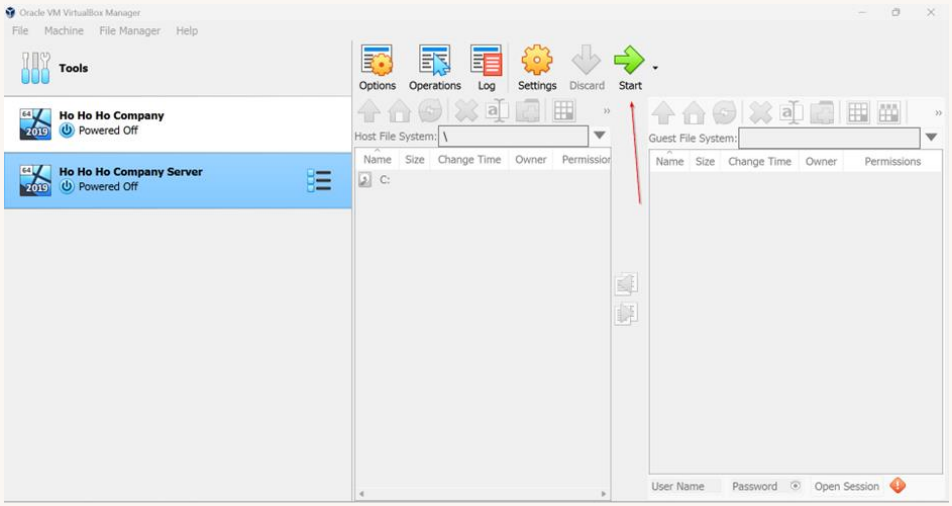
THE THIRD STAGE IS SETTING UP THE VIRTUAL HARD DISK FOR THE SERVER. THIS WILL BE THE DRIVE THAT THE OS WILL BE PUT ON IN LATER STEPS. THE MEMO REQUESTS THAT 47GB, SO FOR THIS SERVER IT WILL BE ROUNDED UP TO 50GB. CLICK NEXT TO CONTINUE.



THE FINAL STAGE WILL SHOW ON THE INFORMATION THAT WAS ENTERED IN OR SET FOR THE SERVER DURING THE ENTIRE PROCESS. VERIFY THAT ALL THE INFORMATION IS CORRECT AND WHERE IT SHOULD BE THEN CLICK FINISH TO CREATE THE SERVER.

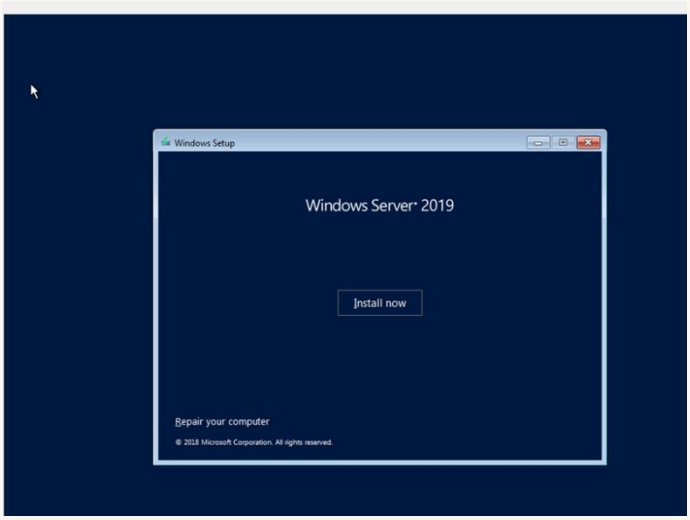


THE SERVER SHOULD THEN APPEAR ON THE LEFT HAND SIDE OF THE VIRTUALBOX MANAGER. ONCE IT SHOWS UP A NEW BUTTON SHOULD APPEAR TITLE START TO LOAD UP THE VIRTUAL MACHINE.

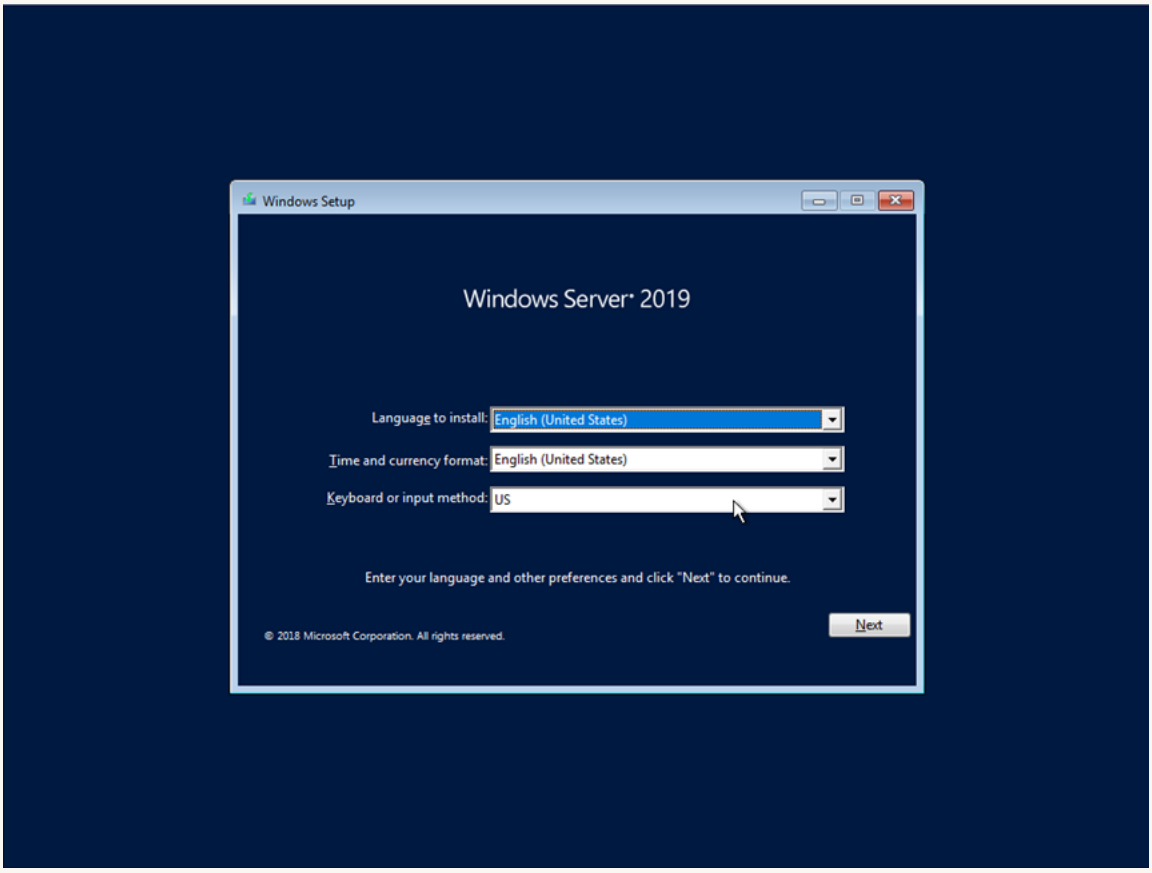


STEP 3

TO START THE VIRTUAL MACHINE, CLICK ON THE START BUTTON, THE GREEN ARROW. A NEW POPUP WILL APPEAR AND WILL GO FROM A BLACK SCREEEN TO THE WINDOWS LOGO. IT IS READY TO WHEN THE START UP WIZARD APPEARS. CLICK INSTALL NOW TO BEGIN.

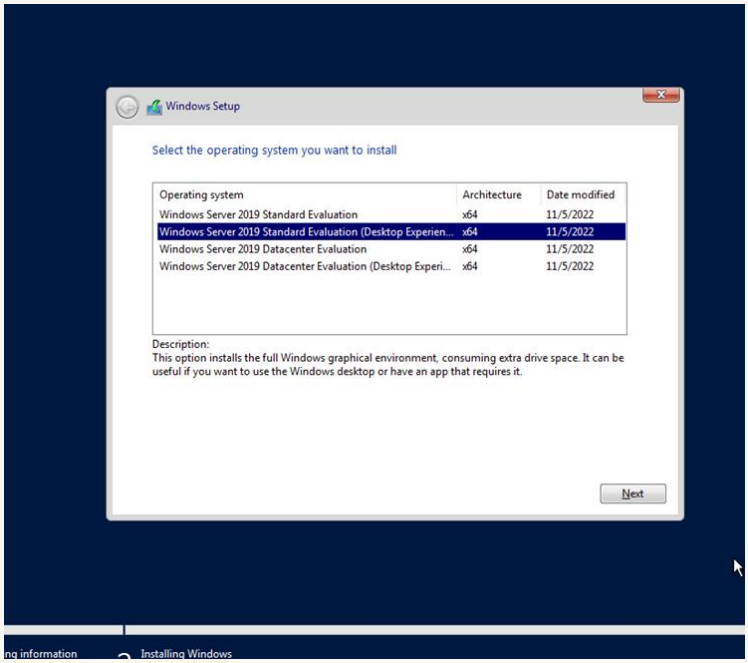


THE FIRST STAGE OF THE OS INSTALL IS THE SELECTION OF THE LANGUAGE,TIME, AND KEYBOARD. THESE CAN BE SET TO THE SPECIFICATIONS OF THE USERS, THIS SERVER WILL LEAVE THE DEFAULT OF ENGLISH/USA SELECTIONS.

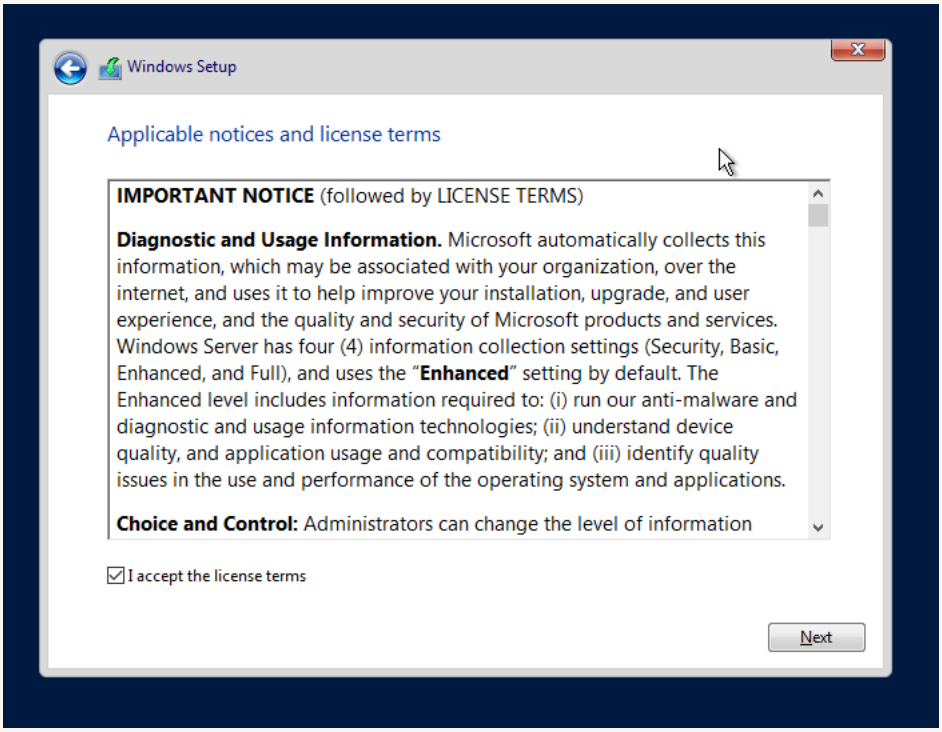


STEP 3 CONTINUED

THE SECOND STAGE ASKS WHAT SPECIFIC OS THIS SERVER WILL RUN ON. USER MUST SELECT STANDARD EVALUTATION DESKTOP EDITION AS IT PROVIDES A GUI FOR THE USER WHILE THE OTHERS DO NOT.

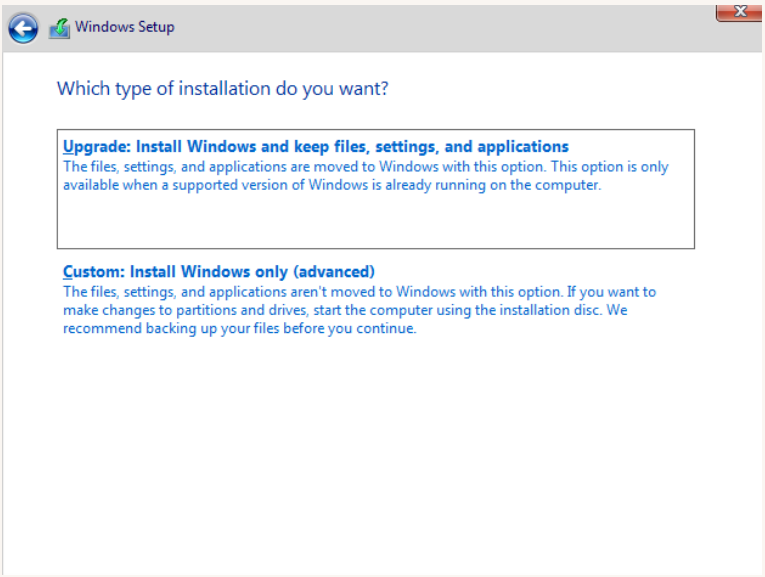


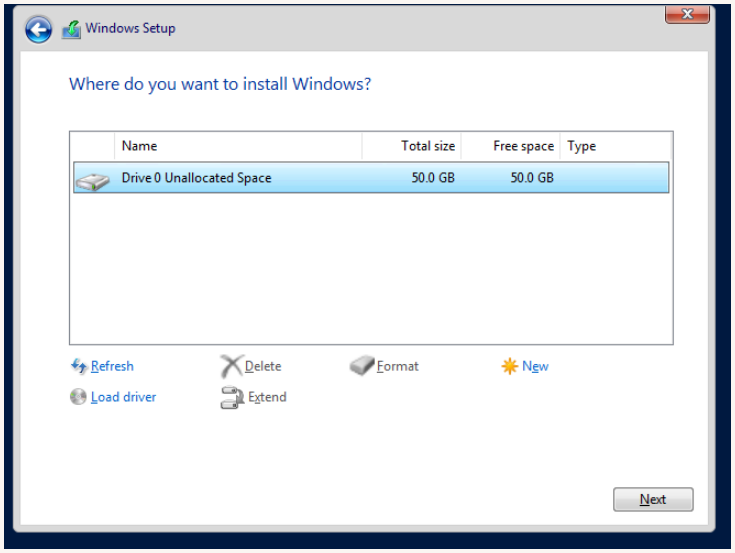
THE THIRD STAGE IS THE APPLICABLE NOTICE AND LICENSE TERMS DOCUMENT. CHECK THE BOX AND ACCEPT THE TERMS.



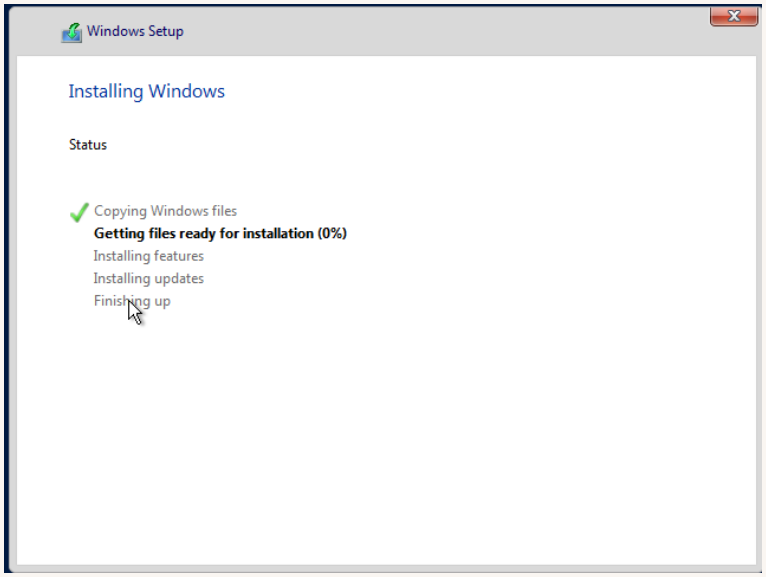
STEP 3 CONTINUED

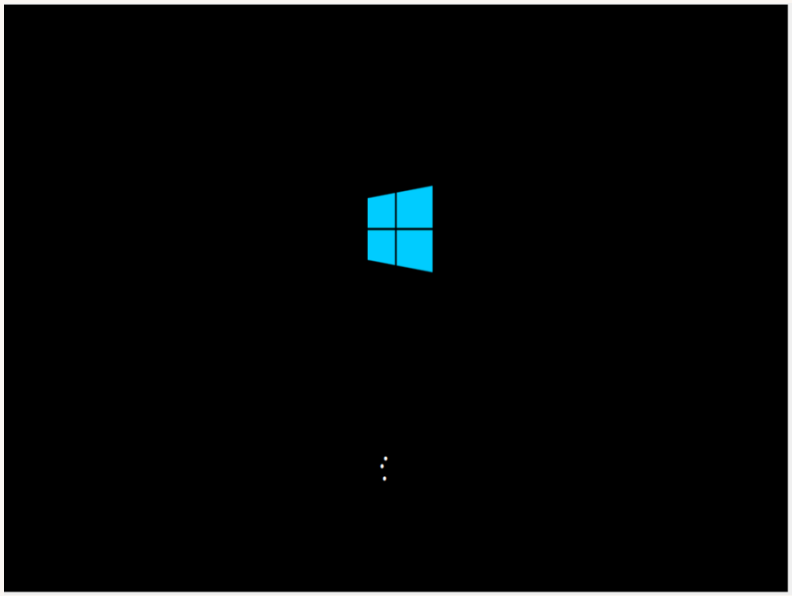
THE FOURTH STAGE ASKS WHICH TYPE OF INSTALLATION TO DO FOR THE OS. SINCE THIS IS A CLEAN INSTALL OF THE WINDOWS SERVER OS SELECT CLEAN INSTALL. IT WILL THEN ASK WHAT PARTITION TO INSTALL THE OS ON. SINCE THERE IS ONLY ONE THE USER CAN EITHER CLICK NEXT TO USE THE ENTIRE DRIVE SELECT NEXT, OR CLICK NEW TO DIVIDE UP THE CURRENT DRIVE SO THAT THE OS AND SYSTEM RECOVERY TAKES UP ONLY A PART OF IT.





THE FINAL STAGE WILL SHOW THE STEPS AS THEY ARE COMPLETING BY THE ACTUAL INSTALLATION OF THE OS. ONCE COMPLETED THE COMPUTER MAY GO BLACK BEFORE GOING TO A WINDOWS LOGO. IT WILL THEN BOOT TO THE BASIC WINDOWS LOGIN IN SCREEN.





CONGRATULATIONS, THE OS HAS OFFICIALLY BEEN INSTALLED AND SET UP. THE NEXT CHAPTER WILL GO INTO THE BASIC SETUP FIXES THAT MUST BE DONE ONCE LOGGED IN.

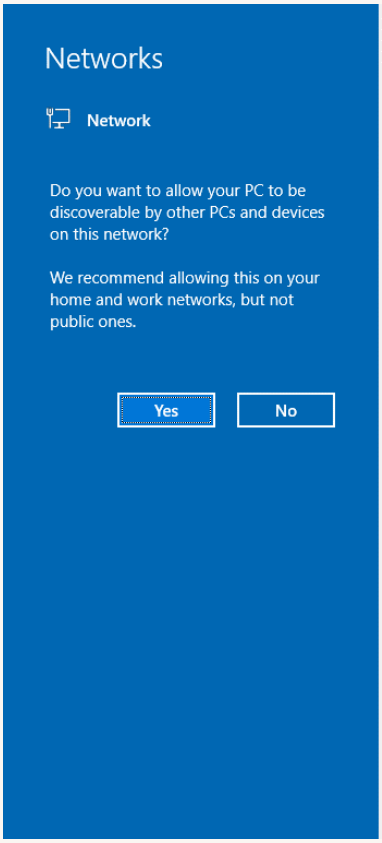
BASIC FIXES

CHAPTER 4

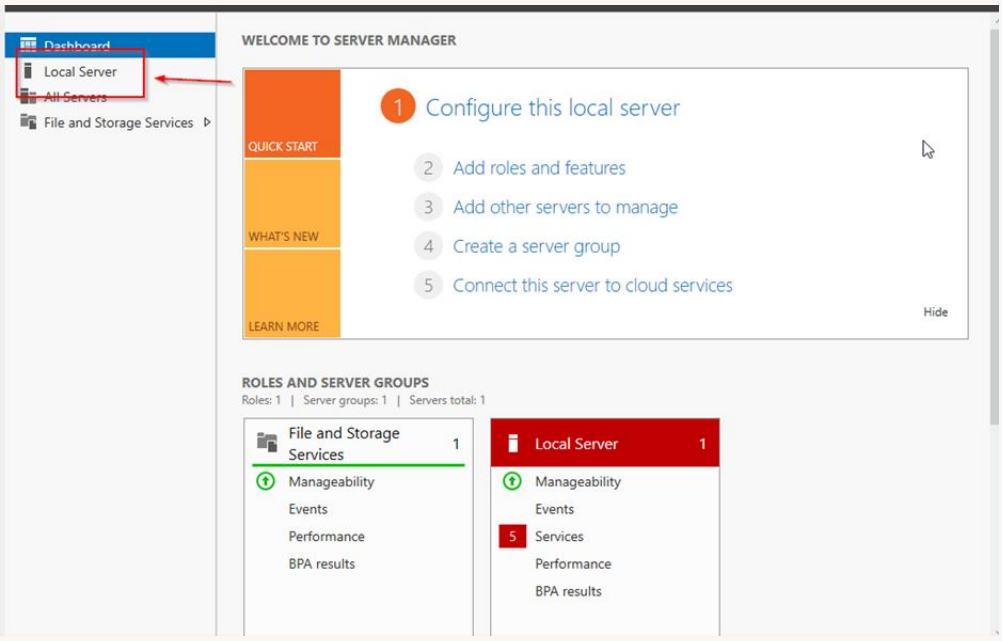
THIS CHAPTER WILL FOCUS ON THE BASIC FIXES THAT NEED TO BE DONE ONCE THE SERVER IS BOOTED UP FOR THE FIRST TIME.

STEP 1

TO LOGIN TO THE MACHINE THE USER MUST CLICK LCTRL AND DELETE TO GET TO THE LOG IN SCREEN. THE LOG IN CREDENTIALS ARE THE SAME ONES THAT WERE SET IN THE PREVIOUS CHAPTER. ONCE LOGGED IN THE NETWORK POPUP WILL APEAR CLICK YES TO ALLOW THE COMPUTER TO BE DISCOVERED ON THE NETWORK.

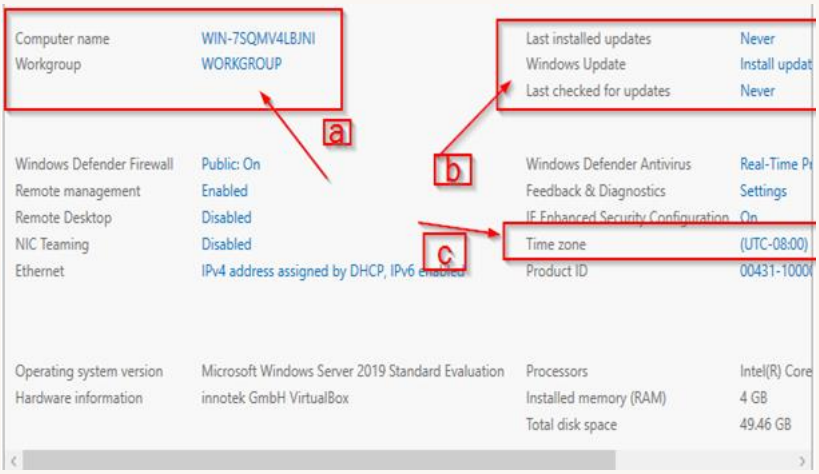


ALL THE WORK THAT WILL BE DONE FROM NOW ON UNTIL THE END WILL BE DONE IN THE SERVER MANAGER. TO ACCESS THE STUFF IN THIS CHAPTER. THE USER NEEDS TO CLICK THE LOCAL SERVER TAB ON THE LEFT SIDE



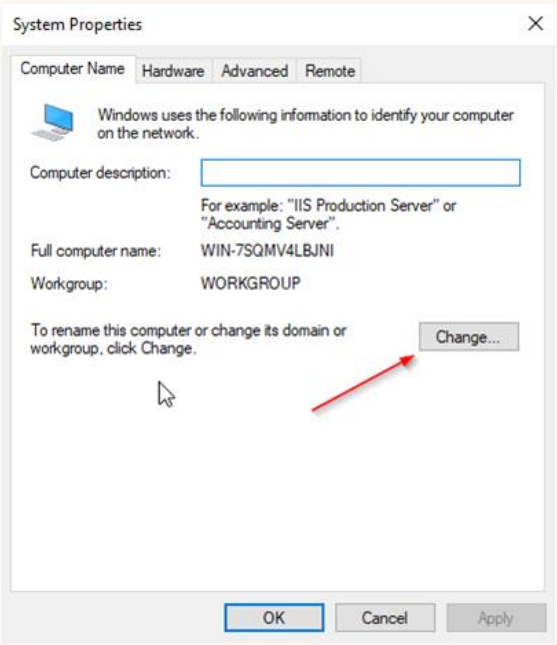
STEP 1 CONTINUED

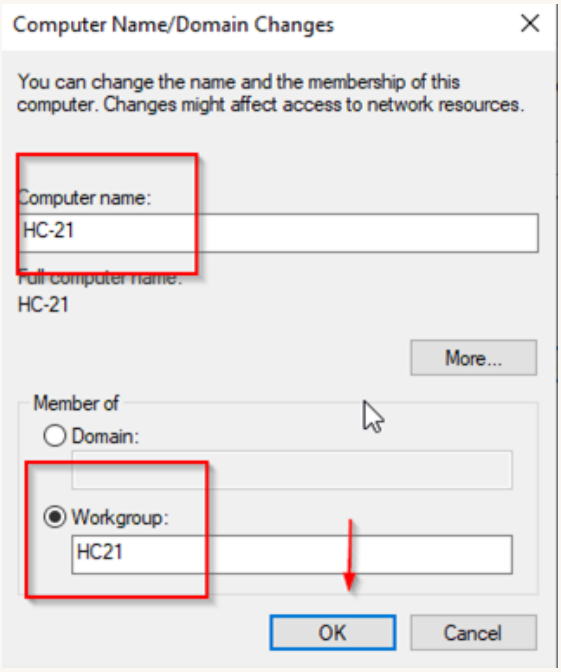
THERE ARE A FEW BASIC FIXES THAT NEED TO BE DONE AT THE REQUEST OF THE MEMO. (A)RENAMING OF THE SERVER AND WORKGROUP.(B)UPDATING THE SERVER TO THE MOST UP TO DATE VERSION AND (C) TIME AND TIME ZONE NEED TO BE ADJUSTED.

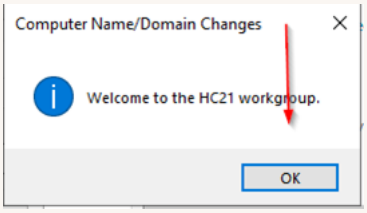


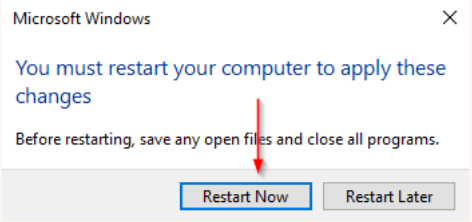
HERE THE SERVER NAME AND THE WORKGROUP NAME CAN BE CHANGED. ONCE THEY ARE CHANGED CLICK OKAY TO APPLY THE NEW NAMES. 2 POPUPS WILL THEN APPEAR THE FIRST STATING WELCOME TO THE WORKGROUP, WHILE THE OTHER WILL WARN THE USER TO RESTART THE COMPUTER FOR THE CHANGES TO GO INTO EFFECT. IT IS BEST TO RESTART THE COMPUTER.

TO RENAME THE SERVER AND WORKGROUP CLICK EITHER THE CURRENT COMPUTER OR WORKGROUP NAME. CLICK THE CHANGE BUTTON UNDER COMPUTER NAMES IN THE SSYSTEM PROPERTIES POPUP MENU.



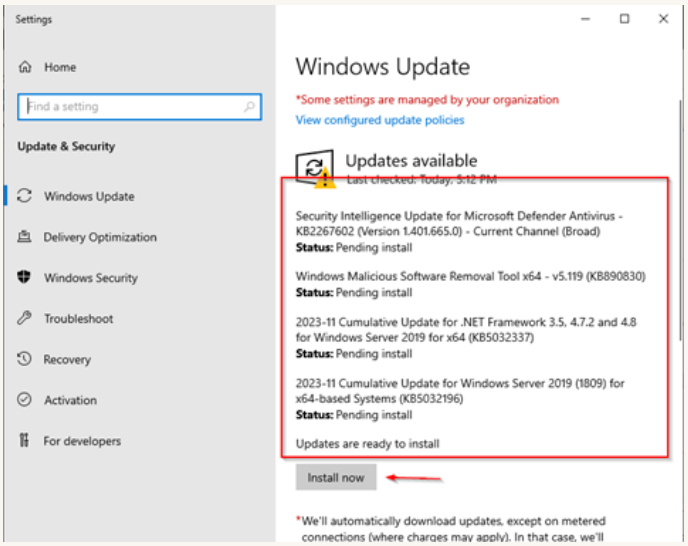






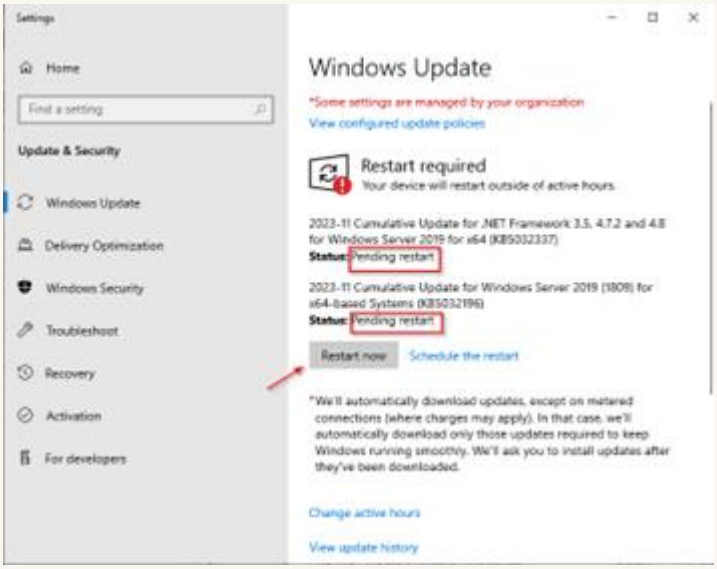
STEP 2

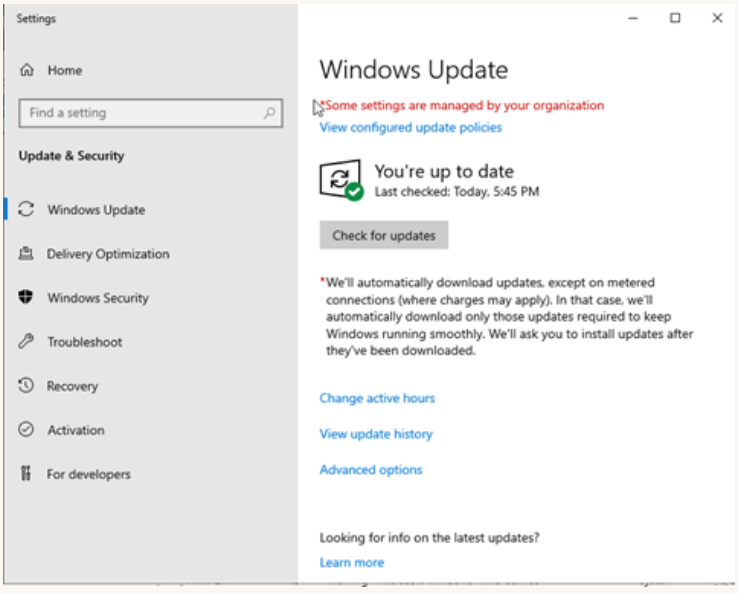
THE NEXT STEP IS TO UPDATE THE SYSTEM TO THE MOST UP TO DATE VERSION THAT IT CAN BE. IT IS BEST TO CONDUCT THE UPDATES ON TUESDAY AS THAT IS THE DAY WINDOWS RELEASE ITS WEEKLY UPDATES. TO GET TO THE WINDOWS UPDATE SCREEN JUST CLICK ON ANY OF THE WINDOWS UPDATE LINKS. HERE IT WILL LOAD ALL CURRENT UPDATES THAT ARE NEEDED FOR THE SYSTEM.



ONCE THE UPDATES ARE READY FOR INSTALL ITS TIME TO CLICK INSTALL NOW, THIS WILL INSTALL THE UPDATES ON THE SERVER.

ONCE THEY ARE FULLY INSTALL, A RESTART IS REQUIRED TO APPLY THESE UPDATES, SO GO AHEAD AND RESTART.

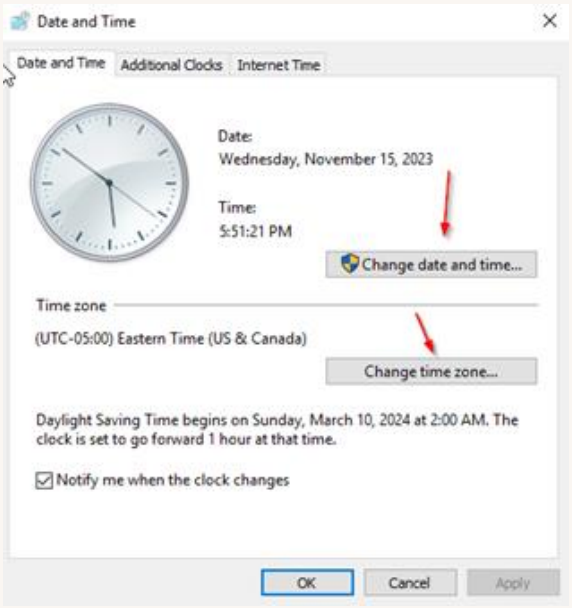


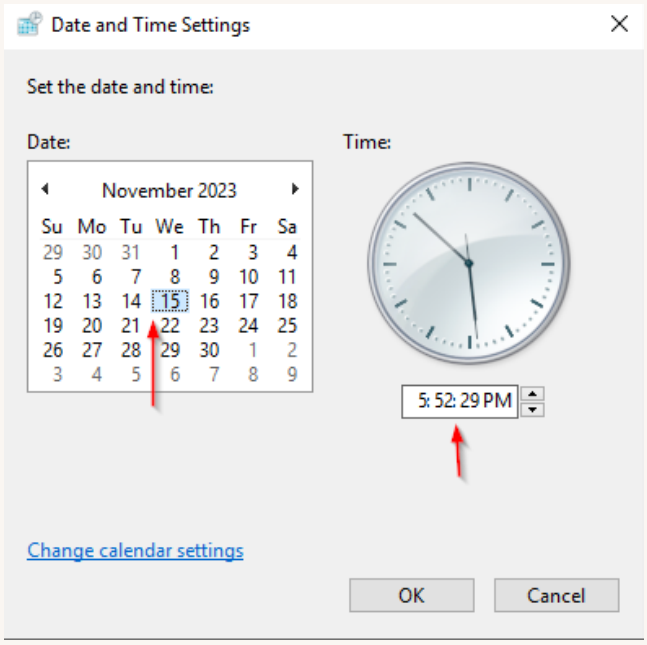


TO VERIFY THAT ALL UPDATES WERE INSTALLED AND APPLIED GO BACK TO THE UPDATE PAGE AND IT WILL SHOW A GREEN CHECK MARK AND STATE THAT THE SERVER IS UP TO DATE.

STEP 3

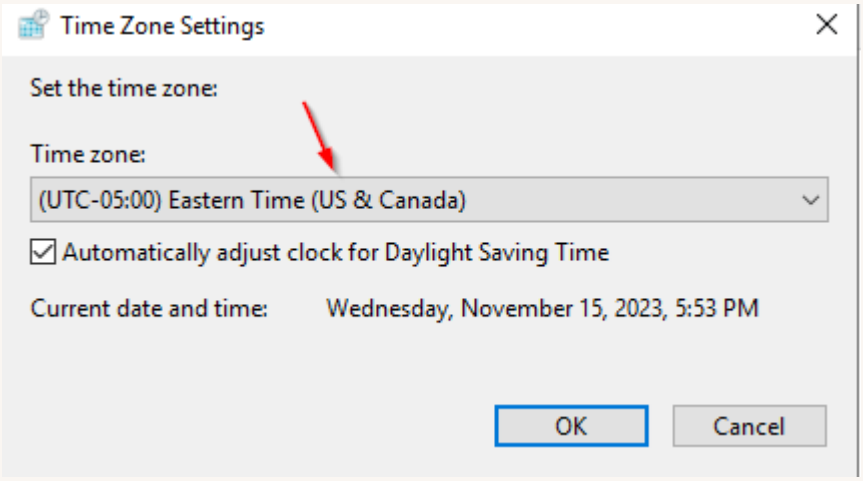
THE FINAL STEP IS TO FIX THE TIME AND TIME ZONE OF THE SERVER. TO EDIT CLICK THE TIME ON THE SERVER MANAGER TO BRING UP THE DATE AND TIME POP UP. TO EDIT TIME ZONE CLICK CHANGE TIME ZONE. TO EDIT DATE AND TIME SELECT CHANGE DATTE AND TIME. THIS CHANGE REQUIRES ADMIN RIGHTS.





TO SELECT THE DATE MAKE SURE THE CALENDAR IS SET TO THE CURRENT MONTH AND CLICK CLICK ON THE DAY NUMBER THAT IS CORRECT. TO FIX TIME EITHER CLICK AND TIME IN THE CURRENT TIME OR USE THE ARROWS TO SCROLL TO THE CURRENT TIME. SELECT OK TO SAVE.

TO SET THE TIME ZONE CLICK ON THE DROP DOWN MENU AND SELECT THE TIME ZONE THAT THE SERVER WILL SITTING IN. THE CREATION OF THE EXAMPLE SERVER IS IN THE EASTERN TIME ZONE SO EASTERN TIME IS SELECTED. CLICK OK TO SAVE



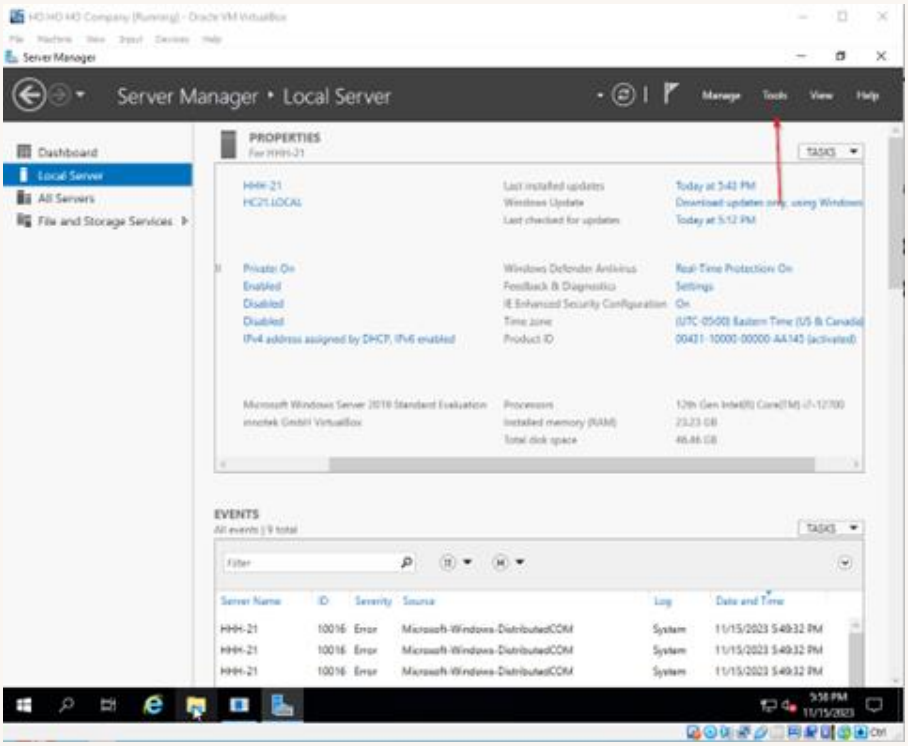
EVENT VIEWER LOGS

CHAPTER

5

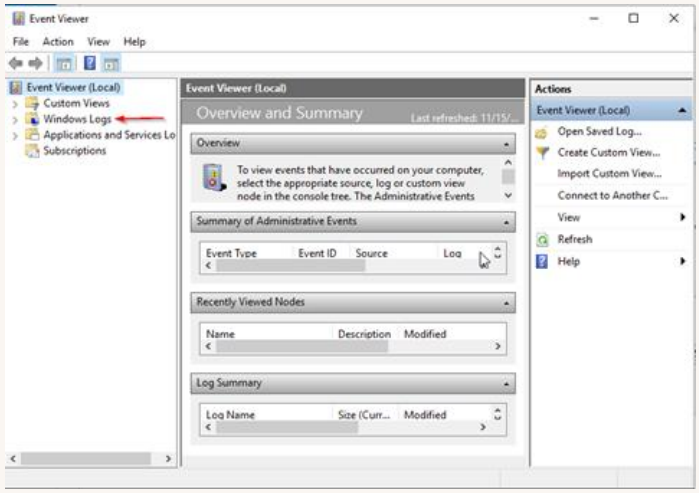
IN THIS CHAPTER, THE EVENT VIEWER IS THE FOCUS AS THE AFOREMENTIONED MEMO REQUEST THAT LOGS BE VIEWED AND SAVED. THE EVENT VIEWER IS A TOOL IN WINDOWS THAT DISPLAYS DETAILED INFORMATION ABOUT SIGNIFICANT EVENTS ON YOUR OCMPUTER. EXAMPLES INCLUDE PROGRAMS THAT DO NOT START AS EXPACTED, OR AUTOMAICALLY DOWNLOADED UPDATES. EVENT VIEWER IS ESPECIALLY USEFUL FOR TROUBLESHOOTING WINDOWS AND APPLICATIONS ERRORS.

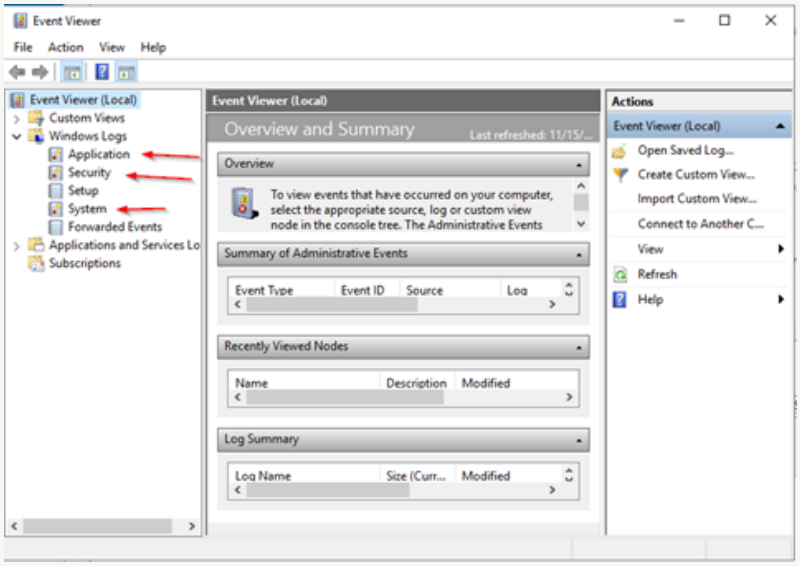
TO GET TO THE EVENT VIEWER, CLICK THE TOOLS DROP DOWN ON THE SERVER MANAGER IN THE TOP RIGHT. SELECT EVENT VIEWER FROM THE LIST.



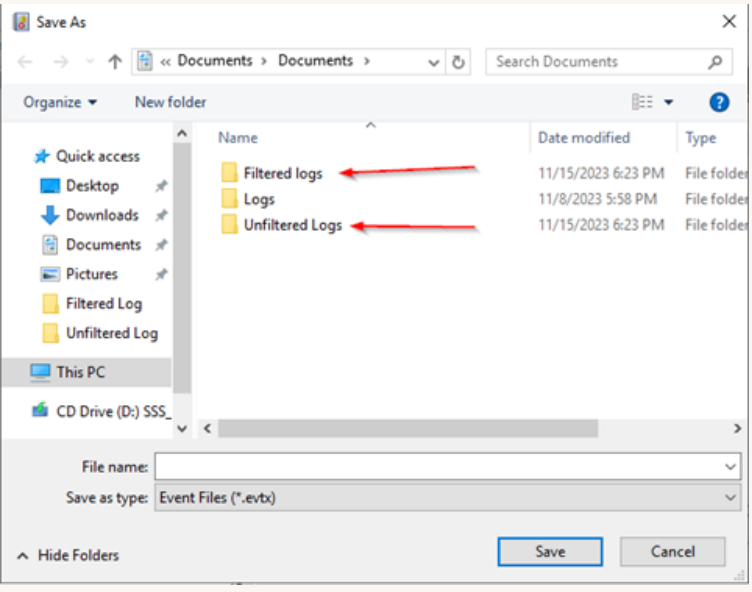
STEP 1

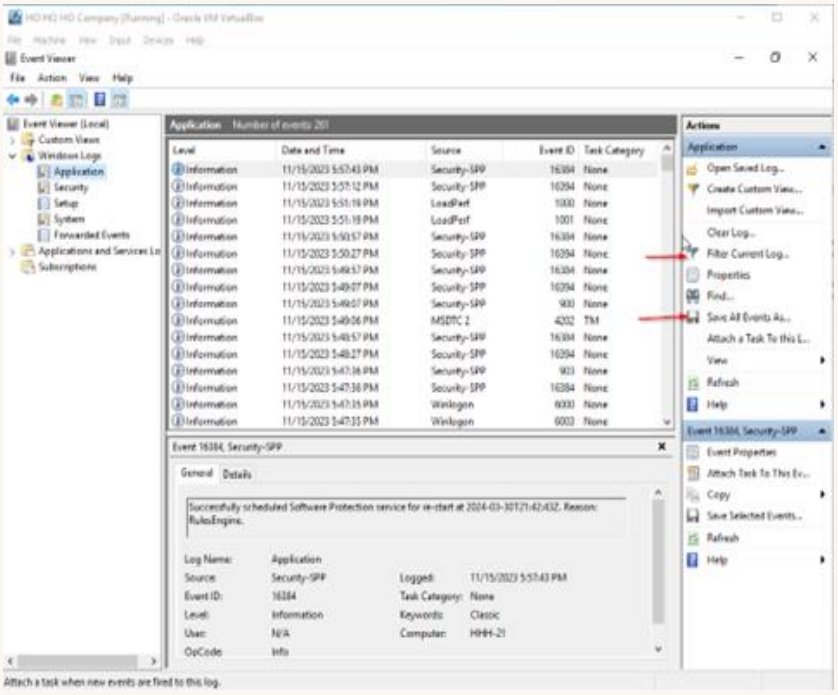
ONCE THE EVENT VIEWER TO GET TO THE LOGS, USER MUST CLICK WINDOWS LOGS. HERE USERS CAN VIEW THE APPLICATION, SECURITY, AND SYSTEM LOG. TO VIEW AND SAVE A LOG SELECT ONE OF THE THREE



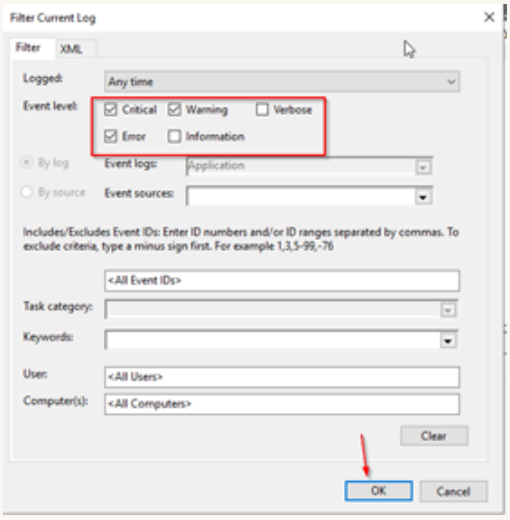


TO FILTER A LOG, CLICK THE FILTER CURRENT LOG OR TO SAVE THE LOG CLICK THE FLOPPY DISK SAVE ALL EVENTS AS. IT IS RECOMMENDED TO CREATE SEPARATE FOLDERS TO KEEP THE FILTERED AND UNFILTERED LOGS SEPERATED.





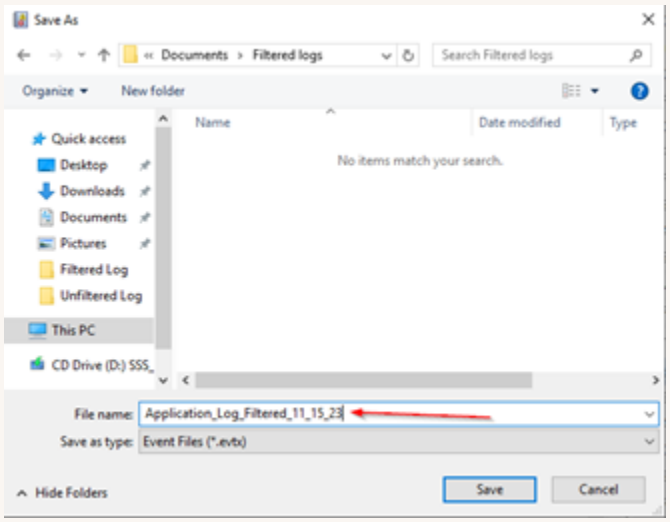
STEP 1 CONTINUED

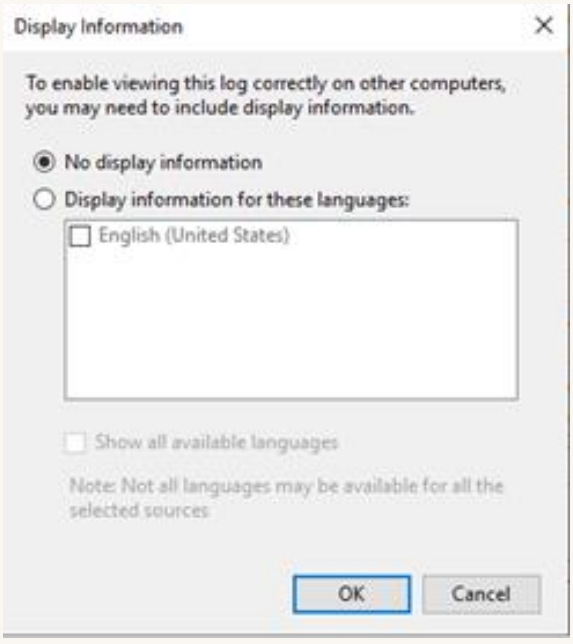


ONCE YOU CLICK THE FILTER CURRENT LOG THE FILTER LOG POPUP APPEARS. HERE THE USER IS ABLE TO SELECT WHAT TYPE OF LOGS TO FILTER. THE MEMO REQUESTS THAT ALL CRITICAL, WARNING, AND ERROR LOGS BE FILTERED AND SAVED. SO CHECK THOSE THREE TYPE SAND SELECT OK.

WHEN SAVING FILES IT IS BEST PRACTICE TO GIVE DETAIL IN THE NAME OF THE FILE SO THAT USERS WILL KNOW WHAT IT IS WITHOUT OPENING IT. HERE THE LOG FOLLOWS THE NAMING STANDARD OF

[LOG TYPE]_[FILTERED/UNFILTERED]_[DATE]





ONCE THE LOG IS SAVED THE DISPLAY INFO POPUP APPEARS. IF THE USERS PLAN ON VIEWING LOGS ON SEPARATE COMPUTERS THEN IT IS RECOMMENDED TO DISPLAY INFORMATION. FOR THIS SERVER IT WILL BE IGNORED.

REPEAT THE PAST TWO STEPS FOR ALL OTHER LOGS.

LOCAL SECURITY POLICY

CHAPTER

6

THE LOCAL SECURITY POLICY APPLICATION IS THE HUB FOR ALL THE INFORMATION ABOUT THE SECURITY OF A DEVICE, THIS INCLUDES LOG IN SETTINGS, PRIVILEGES AND RIGHTS FOR ACCOUNTS, AND THE SYSTEMS AUDITING POLICY. IN THIS CHAPTER, THE USER WILL LEARN TO EDIT DIFFERENT POLCIES TO MEET THE REQUIREMENTS OF THE MEMO

TO ACCESS THE LOCAL SECURITY POLICY APP, CLICK THE TOOL DROP DOWN MENU ON THE SERVER MANAGER AND SELECT LOCAL SECURITY POLICY. TO ACCESS THE FIRST OF THE TWO REQUIRED LOCAL SECURITY POLICIES TO BE CHANGE, CLICK ACCOUNT POLICIES. UNDER ACCOUTN POLICIES SELECT PASSWORD POLICY AND UNDER THAT PASSWORD MUST MEET COMPLEXITY REQUIREMENTS MUST BE DISABLED AND MINIMUM PASSWORD LENGTH MUST BE SET TO 0 IF NOT ALREADY SET TO 0. THE OTHER POLICY THAT NEEDS TO BE CHANGED IS THE MESSAGE OF THE DAY POLICY. TO GET TO IT GO TO LOCAL POLICIES, UNDER THAT GO TO SECURITY OPTIONS AND FIND INTERACTIVE LOGON:MESSAGE TEXT FOR USERS ATTEMPTING TO LOG ON AND INTERACTIVE LOGON: MESSAGE TITLE FOR USERS ATTEMPTING TO LOG IN. CLICK ON EACH ONE TO BE ABLE TO ADD THE BODY AND TITLE FOR THE MESSAGE OF THE DAY.