

Windows 10 Pro Installation on Virtual Box Proof of Concept

Student Name

Institution Affiliation

Course

Date

Introduction

This document describes the process of installing the Windows 10 Operating System and also gives a detailed explanation of the feasibility of the process involved. The Windows 10 Operating System is a product of the Microsoft Corporation, a technology corporation involved mainly in computer software but also in services related to computer software and also electronics. It allows the consumer to use the Microsoft Office suite. This is a package consisting of some of the most advanced pieces of software for the average consumer, these are:

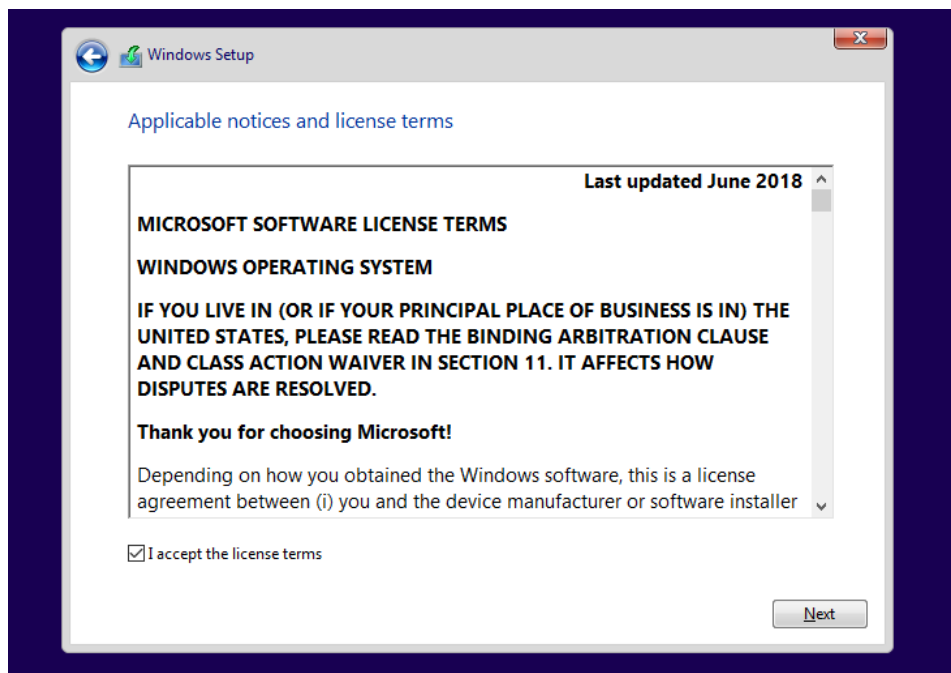
1. Microsoft word: This is one of the most advanced software that can be used for word processing. It allows the users to create documents of various types, whether formal or informal. Text documents are a very important aspect of the current technological age since it allows the use of soft copy documents instead of the tedious processes involved in sending physical letters.
2. Microsoft Excel: This is a spreadsheet program. It is used to perform bulk calculations related to a group of individuals or organizations. Its use can range from simple pieces of data to complicated ones. It can also be used to generate charts, which can convert large pieces of data into information that is visually easier to understand and also less tedious. It can be a very important aspect especially for accounting organizations, since it eliminates the tedious process of manual processing of accounting data.
3. Microsoft Access: This is a database management software. Though its use may seem a bit complicated to the average user, it is quite simple with little tutoring. It allows organizations such as this to set up an in-house software specifically tailored to their needs. It allows the administrator to track activities of the organization over long periods of time such as even years.
4. Microsoft PowerPoint: This is a software used to develop visually appealing documents such as certificates and memorandums. Its is very important since it eliminates the monotony of normal every day documents and allows the development of visually appealing documents.

The Windows 10 Operating System can be installed in various computers with different processing capabilities. It requires a minimum processor clock speed of 1GHZ, this happens to be a very cheap option for the normal consumers compared to the existing more powerful and advanced processor options. The minimum requirement for RAM (Random Access Memory) for this operating system is! gigabyte, more common ram options currently are a minimum of 4 gigabytes, this shows that the current existing RAM options are extremely suited for use of this operating system. The other requirement is the hard disk space, for which a minimum of 16 Gigabytes for the 32-bit version of the operating system or a minimum of 20 Gigabytes for the 64-bit version of the operating system is required. For this document, the 64-bit version was used.

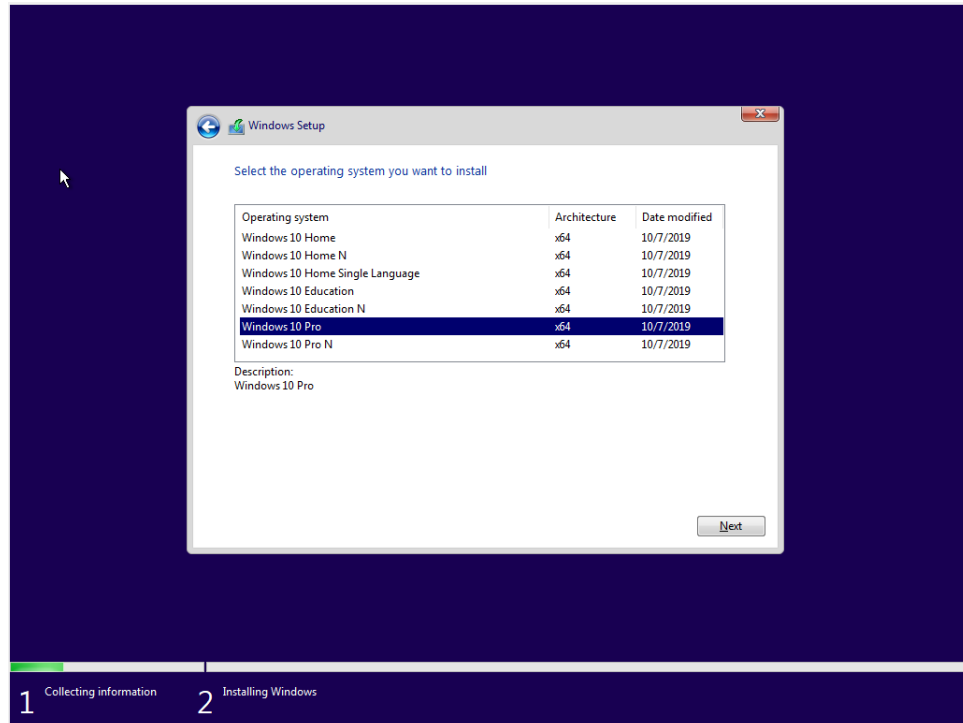
Part 1: Windows Installation

License acceptance:

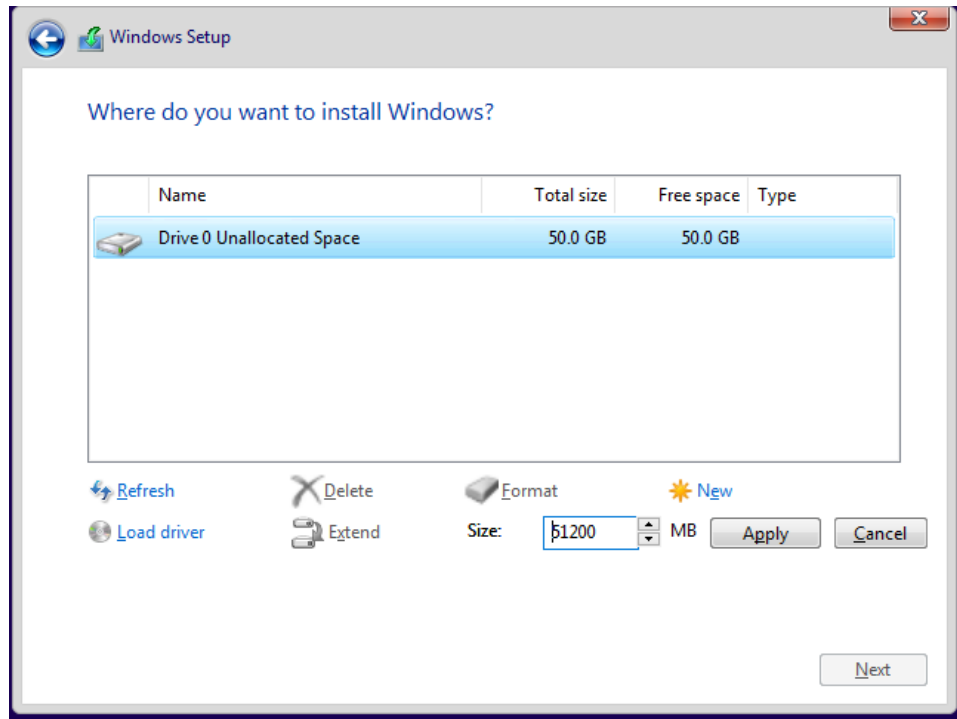
This is a necessary step where the terms and conditions regarding the license of the Windows 10 Pro operating system are accepted. The terms have to be accepted before proceeding.

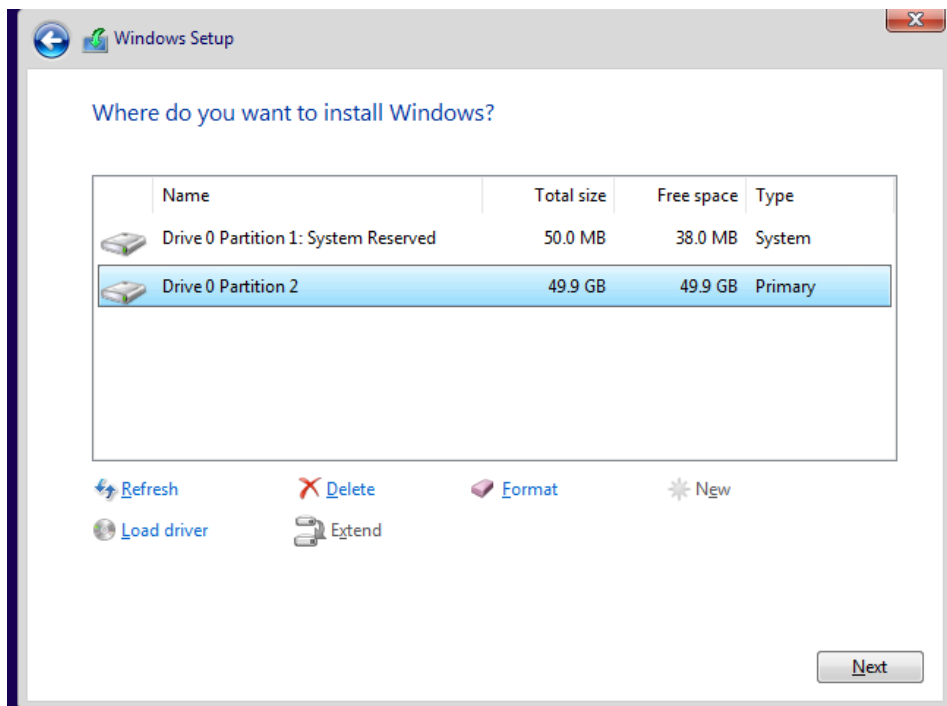
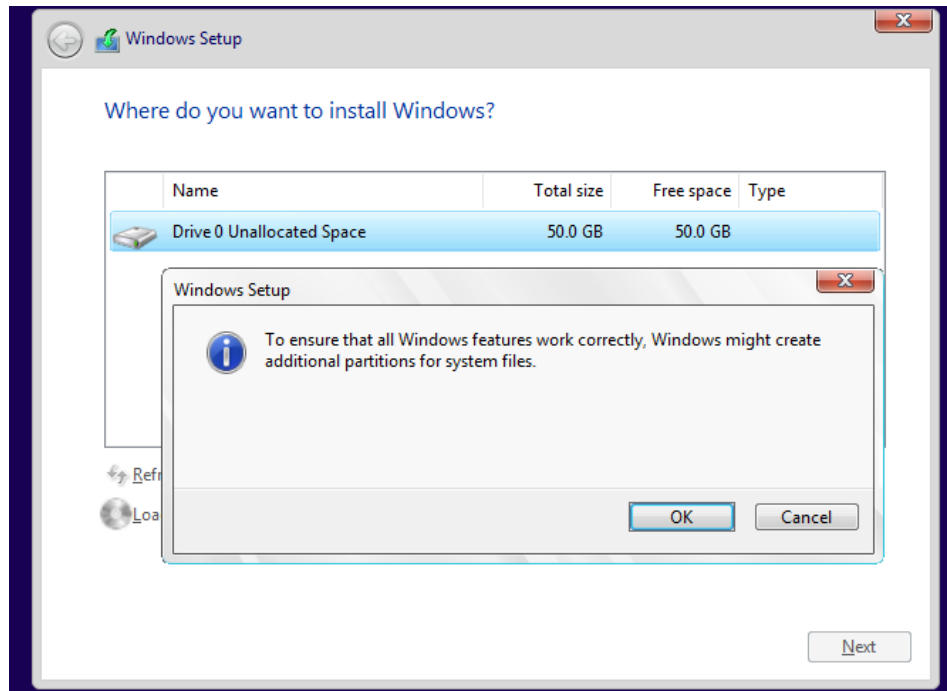


OS Version:

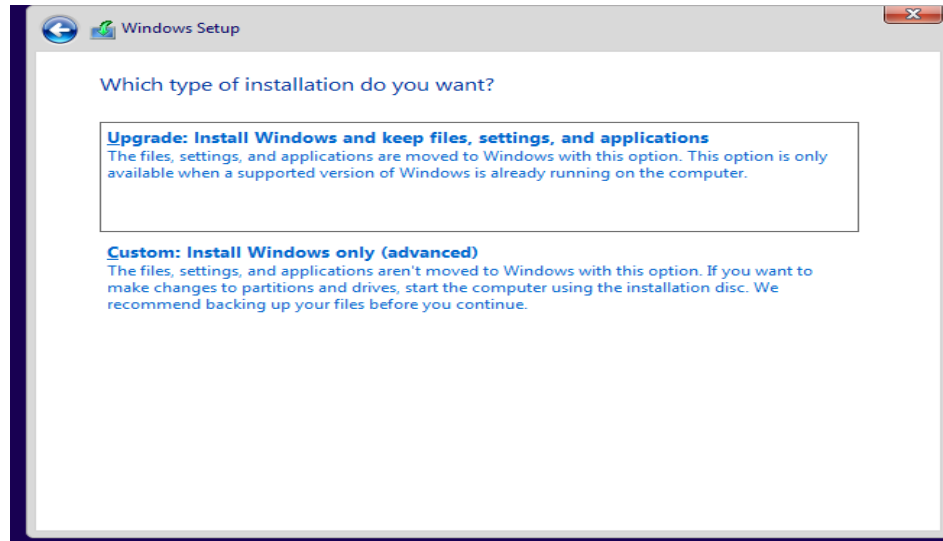


Disk configuration:

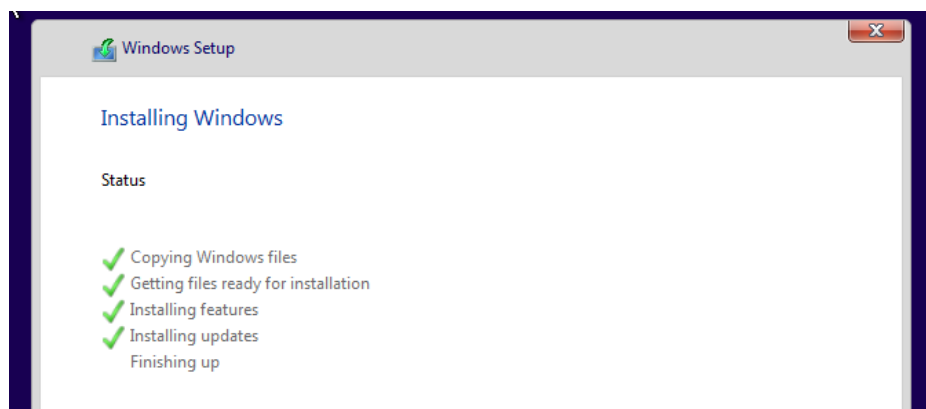
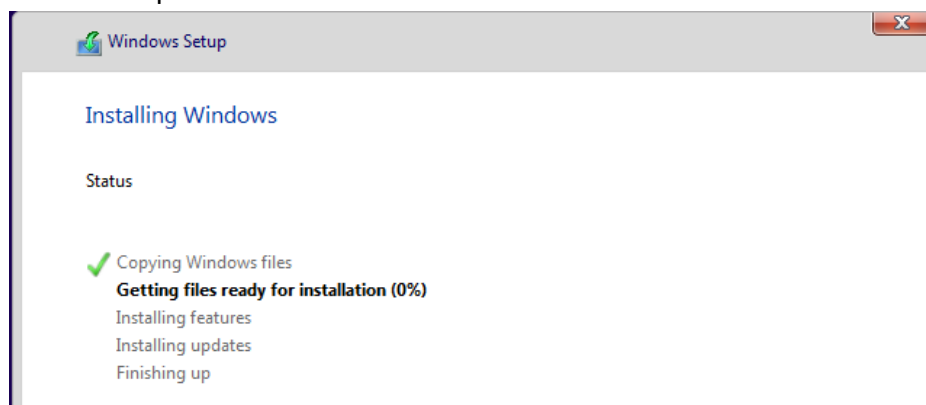




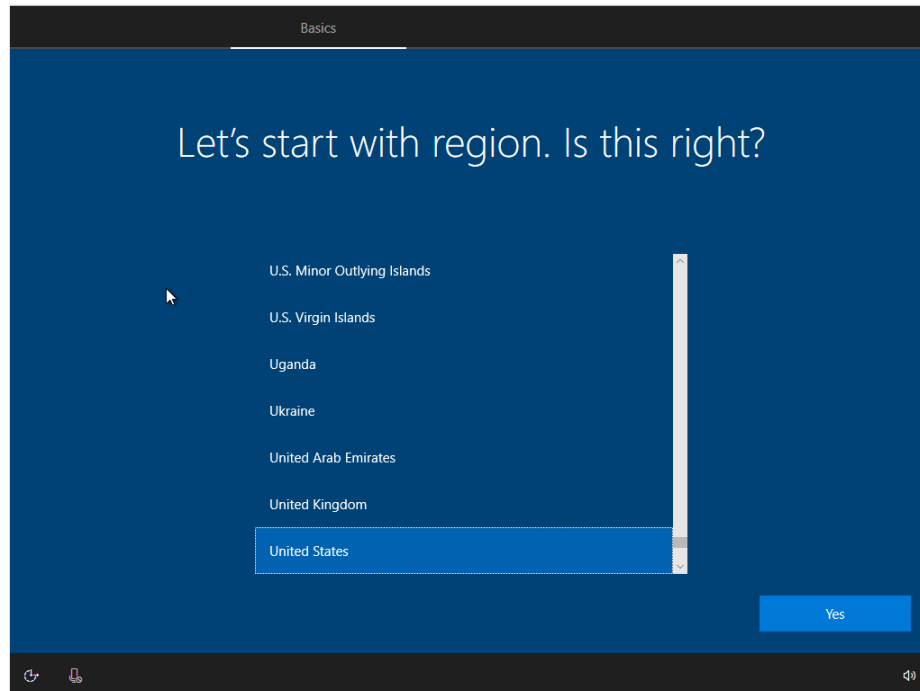
Custom installation vs. upgrade installation:



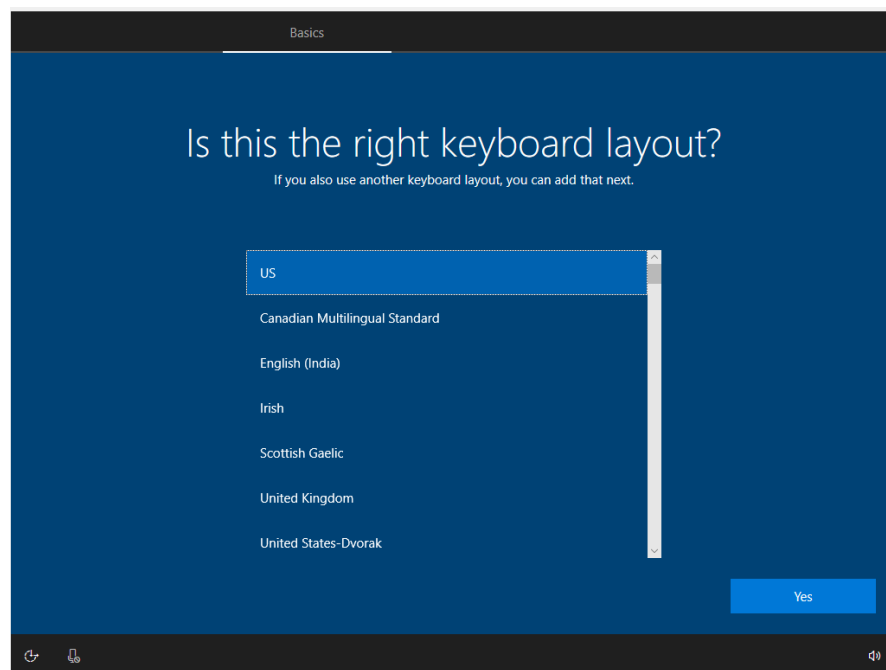
Installing Windows setup:



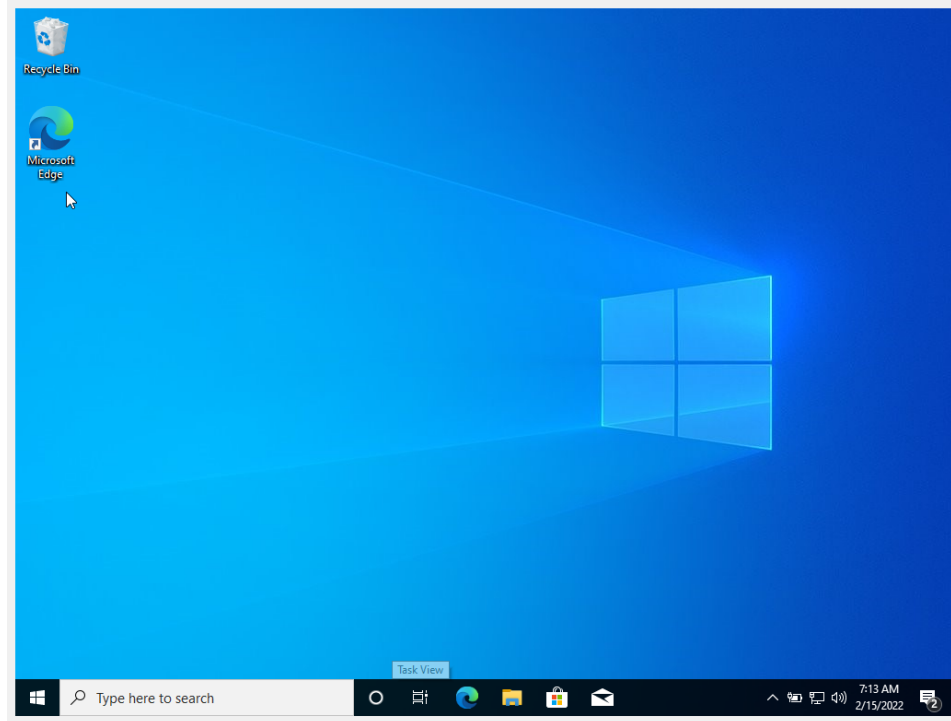
Region:



Keyboard:



Host machine up and running: This screenshot shows the machine immediately after installation.

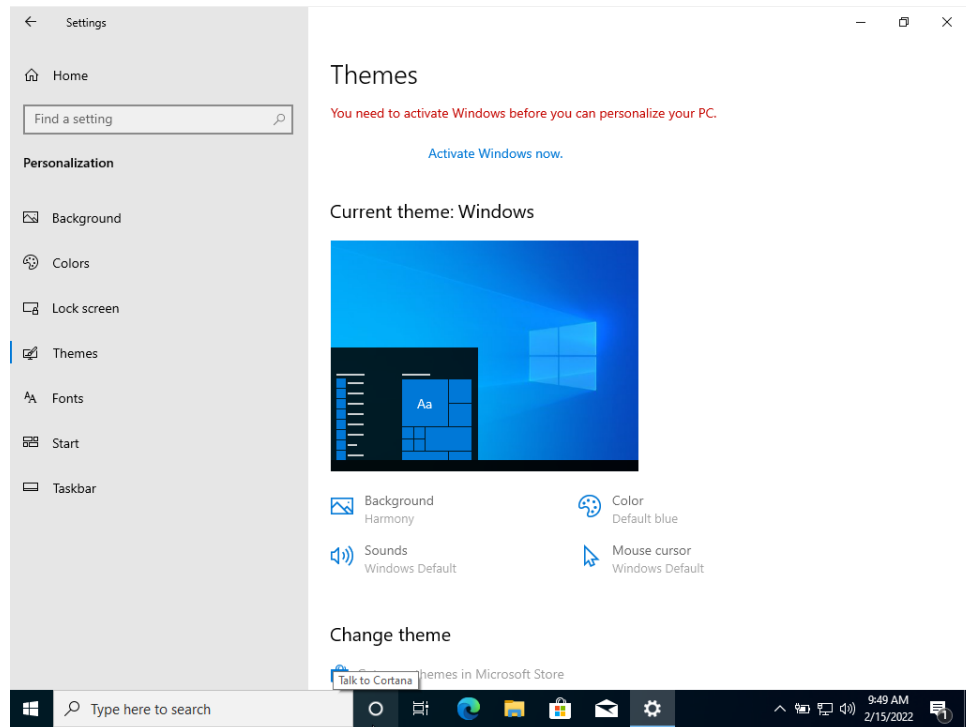


Part 2: Windows Configuration

Step 1: Computer Name

Computer name, domain, and workgroup settings		
Computer name:	DESKTOP-MRJI76C	 Change settings
Full computer name:	DESKTOP-MRJI76C	
Computer description:		
Workgroup:	WORKGROUP	

Step 2: Desktop Theme



Step 3: Local User Account

Name	Full Name	Description
Administrator		Built-in account for administering the computer/domain
DefaultAccount		A user account managed by the system.
defaultuser0		
Guest		Built-in account for guest access to the computer/domain
MARQWISE DYNAMICS		
WDAGUtilityAccount		A user account managed and used by the system for Windows

Step 4: Local Group Account

Name	Description	Actions
Access Control Assistance Operators	Members of this group can remotely query authorization attributes and permissions.	Groups More Actions
Administrators	Administrators have complete and unrestricted access to the computer/domain.	
Backup Operators	Backup Operators can override security restrictions for the sole purpose of backing up or restoring files.	
Cryptographic Operators	Members are authorized to perform cryptographic operations.	
Device Owners	Members of this group can change system-wide settings.	
Distributed COM Users	Members are allowed to launch, activate and use Distributed COM objects on the local machine.	
Event Log Readers	Members of this group can read event logs from local machine.	
Guests	Guests have the same access as members of the Users group by default, except they cannot log on locally.	
Hyper-V Administrators	Members of this group have complete and unrestricted access to all features of Hyper-V.	
IIS_IUSRS	Built-in group used by Internet Information Services.	
Network Configuration Operators	Members in this group can have some administrative privileges to manage the network.	
Performance Log Users	Members of this group may schedule logging of performance counters, enable and disable logging, and view the logs.	
Performance Monitor Users	Members of this group can access performance counter data locally and remotely.	
Power Users	Power Users are included for backwards compatibility and possess limited administrative rights.	
Remote Desktop Users	Members in this group are granted the right to logon remotely.	
Remote Management Users	Members of this group can access WMI resources over management protocols.	
Replicator	Supports file replication in a domain.	
System Managed Accounts Group	Members of this group are managed by the system.	
Users	Users are prevented from making accidental or intentional system-wide changes.	

Step 5: Add user to local group

```
Administrator: Command Prompt
C:\Windows\system32>net users

User accounts for DESKTOP-MR3176C

-----
Administrator      DefaultAccount      defaultuser0
Guest              MARQWISE DYNAMICS   WDAGUtilityAccount
The command completed successfully.

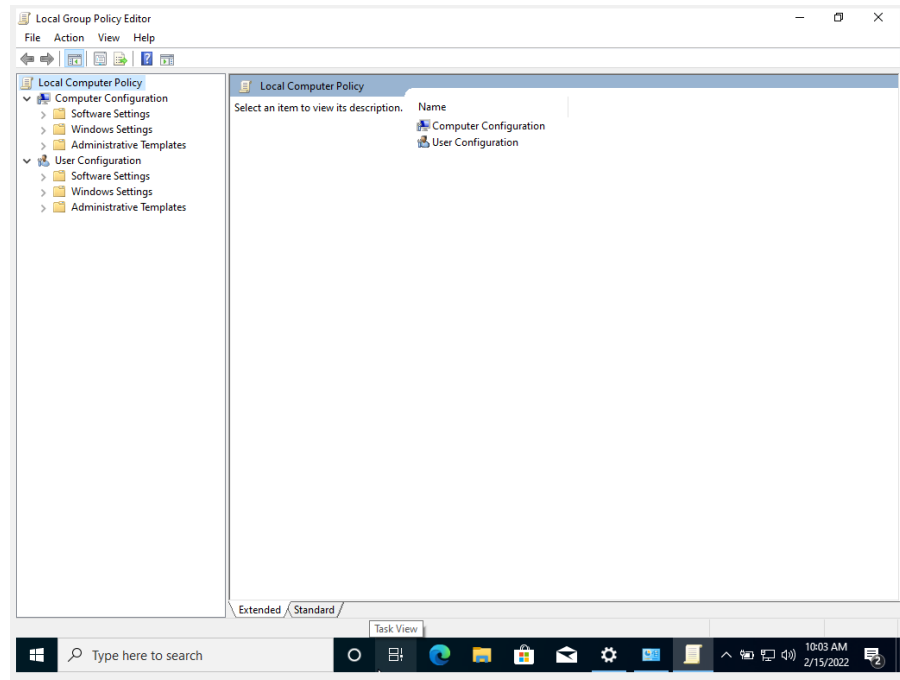
C:\Windows\system32>net localgroup Replicator Administrator /add
The command completed successfully.

C:\Windows\system32>net localgroup Replicator
Alias name     Replicator
Comment       Supports file replication in a domain

Members
-----
Administrator
The command completed successfully.

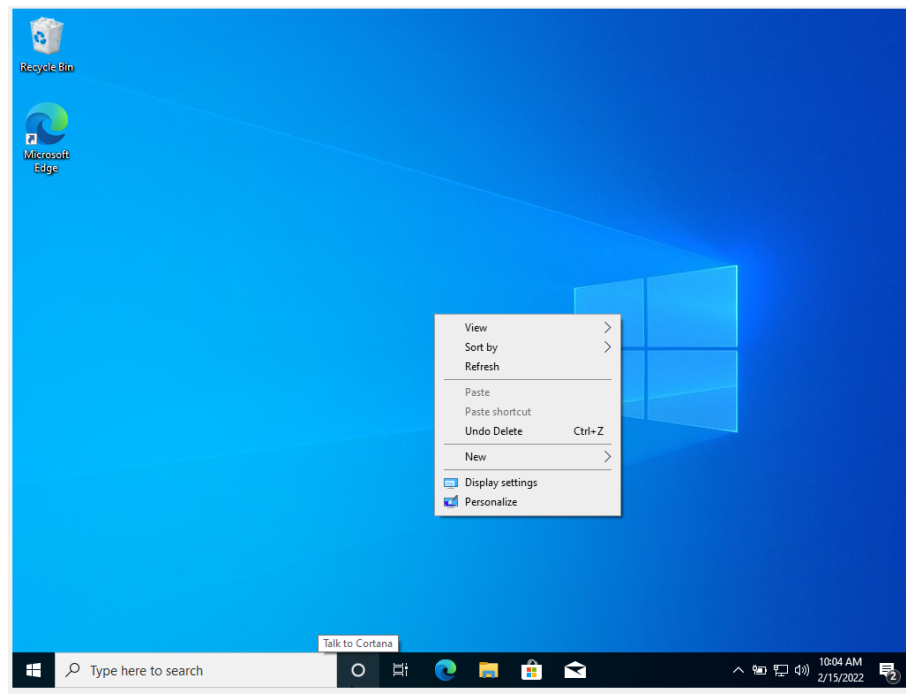
C:\Windows\system32>
```

Step 6: Local Group Policy

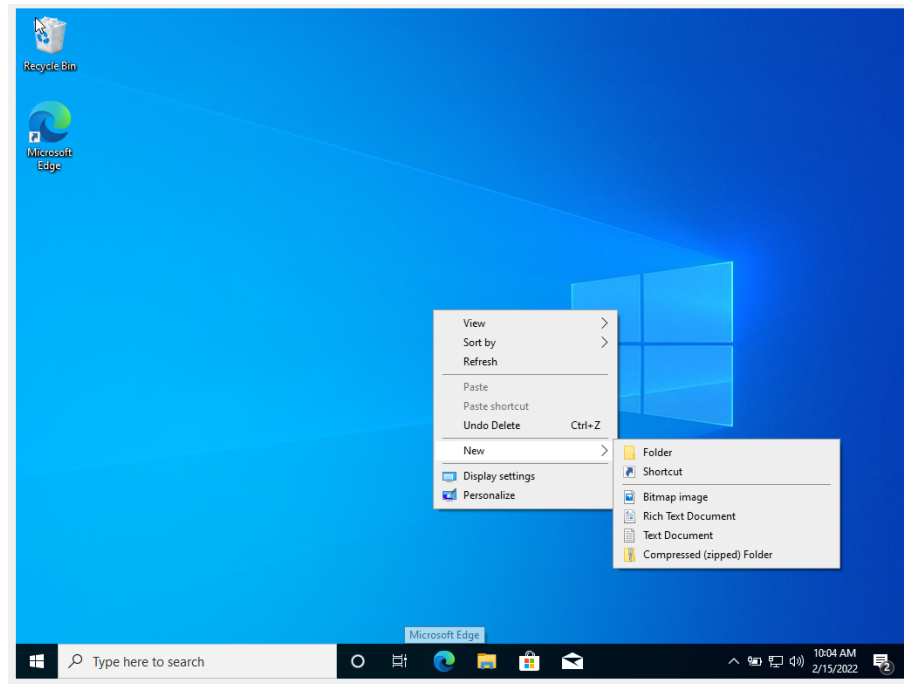


Step 7: Folder creation

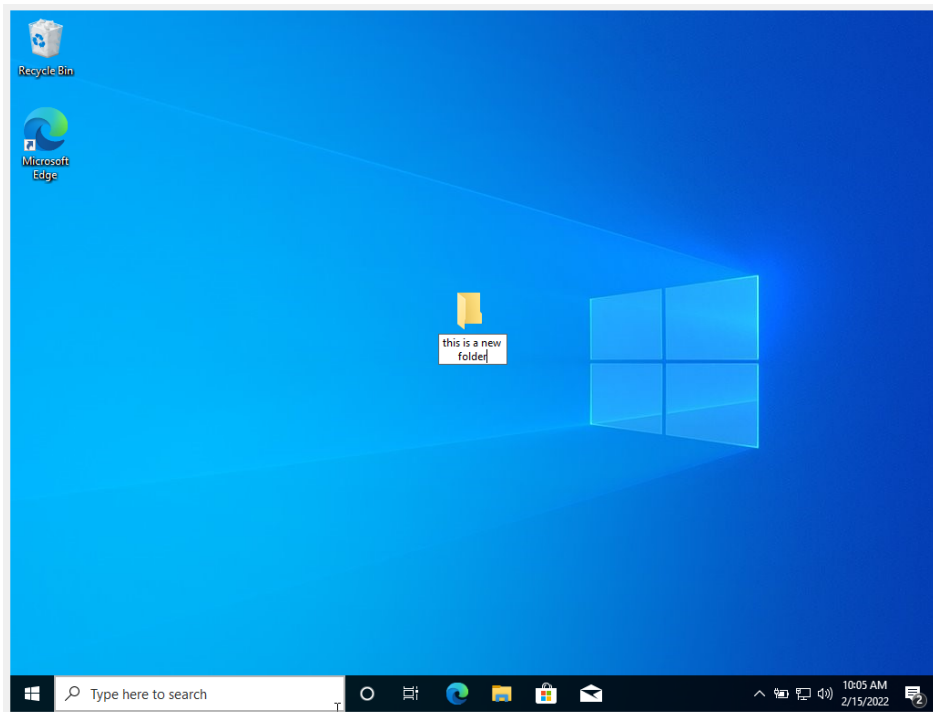
- a. Right click on the window where you want to create a new folder:



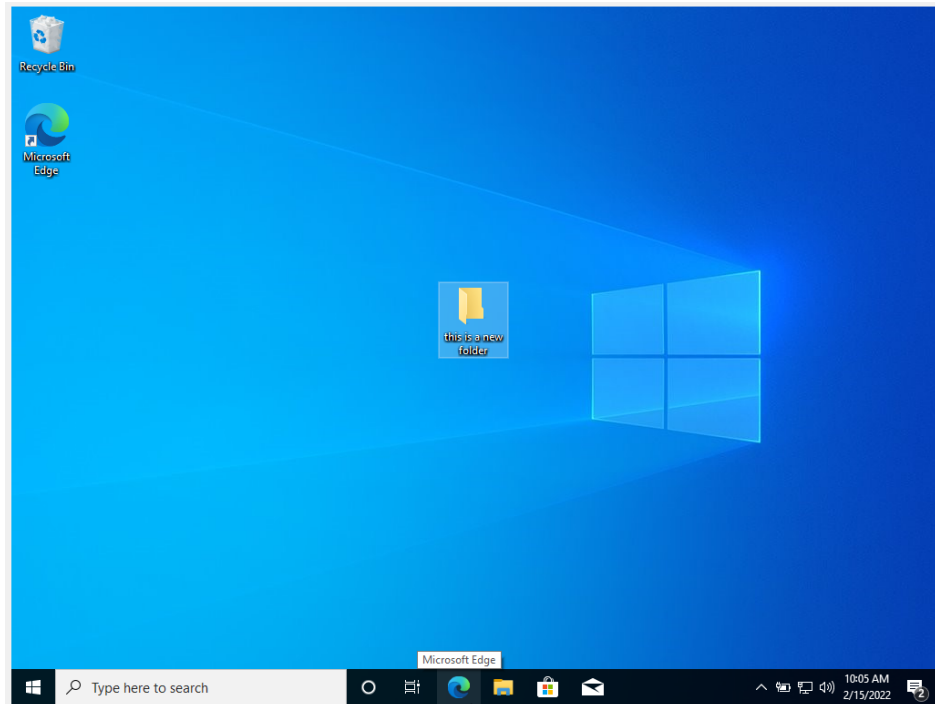
- b. Select 'New' in the displayed menu then select 'Folder':



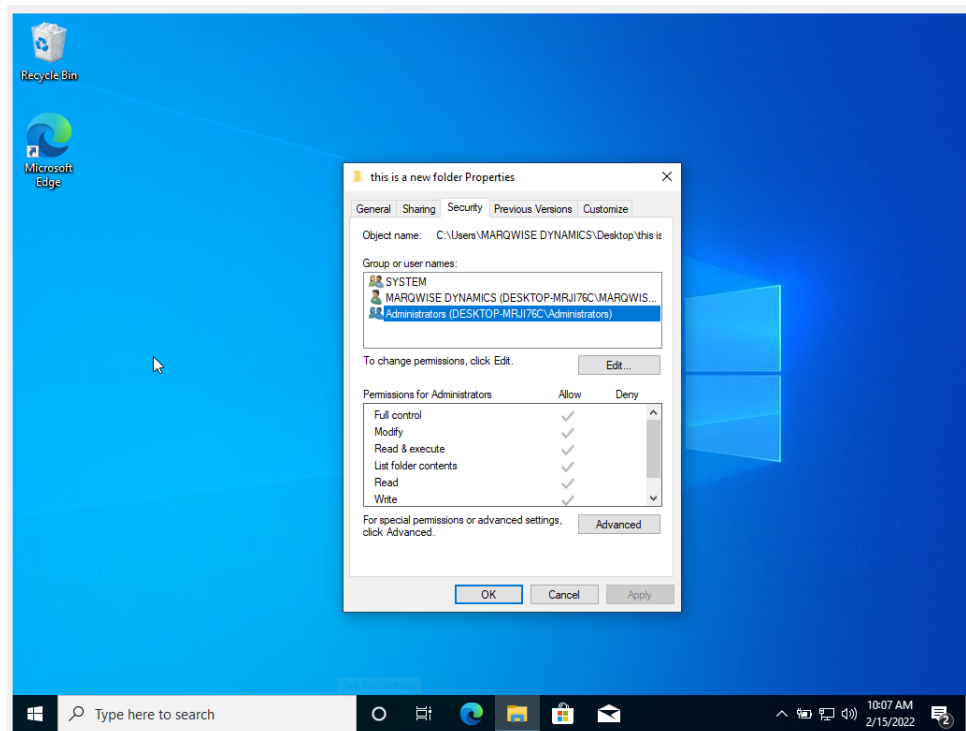
c. Give the new folder a name:



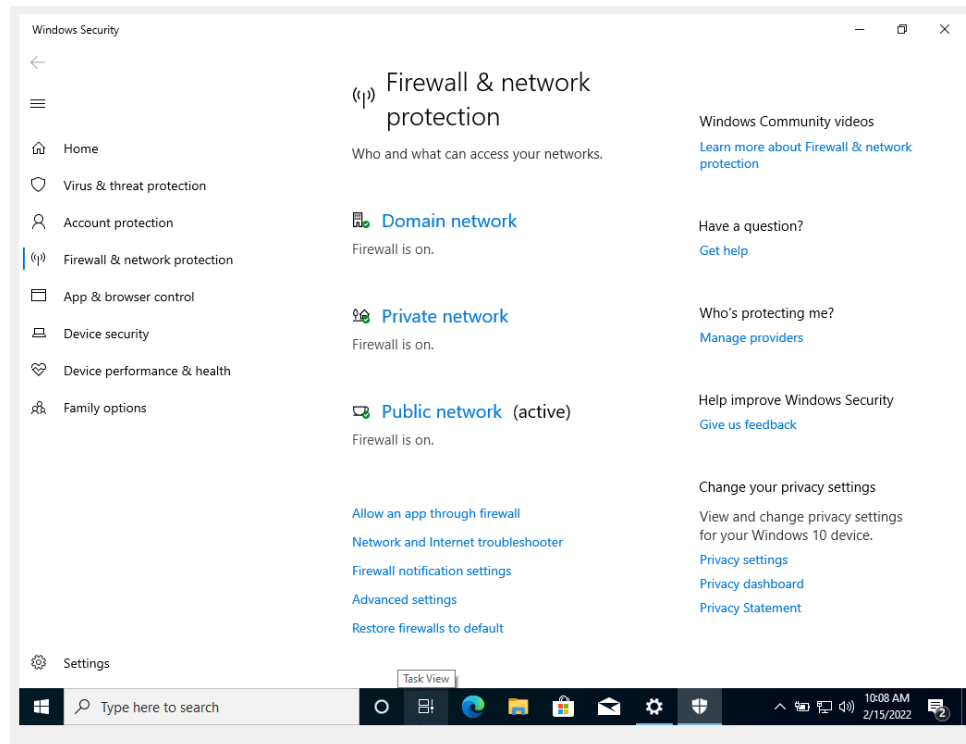
d. Press 'Enter' key on the keyboard, and the folder can be seen:



Step 8: Folder Permissions



Step 9: Firewall Configurations:



Part 3: Windows 10 Upgrade Project Risk Factors

Hardware

As stated earlier, the minimum requirements to run the windows 10 Operating System are: 1 GHz processor, 1 Gigabyte RAM, and 20 Gigabyte of storage. These however, are only the minimum requirements for the operating system, not the optimum requirements. The optimum requirements result in an increase in the amount of money required to set up. In order to avoid issues with hardware limitations, the minimum requirements will need to be bumped up as follows:

- a.) **Processor:** The processor speed will need to be at least 2GHz.
- b.) **RAM:** A ram of at least 4 Gigabytes is recommended to avoid issues with hanging especially when running heavy applications.
- c.) **Storage:** A storage media of at least 100 Gigabytes is recommended in order to allow installation of multiple applications and also storage of relevant media.

These recommended requirements, also called optimal requirements, are mainly used in consideration with the application programs in use. The operating system itself can run smoothly on the minimum requirements, but since the applications are used by the organizations, it is important to use recommended specifications, although they result in an increase in budget.

Licensing

Licensing of computer software is a very important aspect of computer usage. Failure to adhere to licensing instructions can result in legal complications, which normally favor the

owner or the developer of the software in question. All software, especially software used in organizations, need to have the original licenses paid for.

For this organization, Licensing can be an issue in terms of the number of computers using the operating system. If the computers are few, the licenses have to be bought individually for each computer using the operating system. The most common forms of windows 10 licensing are: Retail License, OEM License, Volume License.

The Retail License is sold in a separate package from the computer system and can be moved around from one computer to another. This License is advantageous for single users. The OEM (Original Equipment Manufacturer) License is sold together with the computer it is sold in. It is the cheapest form of Windows Operating System licensing but it has a major drawback, The License can not be moved from one computer to another, this means that if a computer breaks down and a new one is installed, the License of the latter will still have to be paid for and the License of the former will be of no use. The Volume License is normally used by organizations, it is very important since it allows seamless switching of Licenses between computers without having to contact Microsoft Corporation. It is the License best recommended for this organization.