NETW3500 Assignment 1

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# **Glossary:**

### JeOS:

JeOS is an acronym for Just Enough Operating System. A JeOS is a reduced form of an operating system retaining just the essential parts of the OS required for a specific function.

### Microsoft Desktop Optimization Pack:

MDOP helps deploy and manage environments efficently, including Application Virtualization (App-V), User Experience Virtualization (UE-V), BitLocker Administration and Monitoring (MBAM), Advanced Group Policy Management (AGPM) and Diagnostics and Recovery Toolkit (DaRT).

### App-V:

Microsoft Application Virtualization (App-V) makes applications available to user machines without needing to install the application directly on said machines.

### ThinApp:

ThinApp is a suite that allows virtualization and application deployment that allows cutting IT costs alongside enhancing security, compatibility and flexibility.

Hardware

### Full Virtualization:

Full virtualization is a virtualization method that allows simulation of physical hardware by creating a virtual environment. Any software that runs on actual hardware will work inside the VM.

### Emulation Virtualization:

Emulation is the type of virtualization where a software like VMWare Workstation is able to run a computer inside a computer using virtualized hardware, making the computer work like a real computer.

Paravirtualization:

Paravirtualization is a type of hardware virtualization that allows the guest operating system in a virtual machine to access the hypervisor directly, rather than indirectly through a layer, compared to full virtualization.

### Hypervisor Virtual Switch (Hyper-V):

Hypervisor Virtual Switch or Hyper-V is a platform made by Microsoft. This platform allows virtualization for multiple operating systems in a virtual environment.

## Networks

## Internal network

Internal networks are a private network infrastructure that allows computers, phones and other devices to communicate with each other using their private IP to connect to each other.

## External network:

External networks are the part of the network that faces the open internet, allowing devices in the internal to communicate over the Internet.

## Private network:

Private networks are like external networks, however there is a whitelist so only certain devices can access the network.

*Author: Jack Gordon*

Storage  
Block Virtualization

Block Virtualization provides flexible, and logical arrangement of storage capacity to applications and users all while abstracting the physical location.

(Slack, 2012)  
File Virtualization

File Level storage has the file system installed directly and unlike block level virtualization, it supports a default file system.

(Varshney, 2021)  
Memory

### Application-Level Control

Application-Level Control is basically where an application has direct influence on memory allocation.

(GeeksforGeeks, 2023)

### Operating System Level Control

Operating System Level Control is where the OS itself takes more control for memory allocation. Types of it can be Virtual memory, paging, and worst fit memory allocation.

(GeeksforGeeks, 2024)  
   
Software  
 Operating System Virtualization:

Operating System Virtualization is the creation of Virtual Machines. They are operating systems that are installed over a pre-existing operating system also known as a host machine. The virtual machines are also known as guest operating systems.

(GeeksforGeeks, 2023)

### OS Virtualization Application Virtualization

Application Virtualization is instead of running on the system normally. The Application will be stored on a certain area in the system and will run in a isolated area or “virtualized location”. It makes the application run smoother since it doesn’t have access to every resource in the system.

Service Virtualization

Service Virtualization is a way to test a service that might not be stable or ready enough to fully release or not yet fully functional. They can make a simulation and environment for testing purposes to make sure everything is ready and safe to use

# Screenshots

A blue screen with white text

Description automatically generated

Image 1:

A screenshot of a computer program

Description automatically generated

Image 2:

A screenshot of a computer

Description automatically generated

Server Dashboard 1

A screenshot of a computer

Description automatically generated

Server Dashboard 2

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# Appendix A

|  |
| --- |
| Name: Jack Gordon |
| Role within Project: Research, Editor, Writer |
| Time spent on Project: Jan 8th - 10:30AM – 12:30PM  Jan 10th – 10:30AM – 11:30AM  Jan 13th – 12:45PM – 1:30PM  Jan 14th – 8:30AM – 10:30AM |
| Contributions to Project: Jan 8th – Created NETW3500 Document  Jan 10th – Installed Windows Server inside datacenter with Kyle and Liam  Jan 13th – Worked on my section in Glossary  Jan 14th – Continued work in Glossary  Jan 15th – Inserted Work Journal design that’s derived from first semester pod 1 and worked on Marking Rubric |

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| --- |
| Name: Liam Butler |
| Role within Project: Research, Editor, Writer |
| Time spent on Project: Jan 8th - 10:30AM – 12:30PM  Jan 10th – 10:30AM – 11:30AM  Jan 13th – 10:30 AM – 12:30PM  Jan 14th – 8:30AM – 10:30AM, 8:00 PM – 9:00 PM |
| Contributions to Project: Jan 10th – Worked on document while Kyle and Jack installed Windows Server  Jan 13th – Continued working on the Glossary  Jan 14th – Finished my part in the Glossary |

Refences:

*What Is An External Network? - ITU Online IT Training*. (2024, June 12). ITU Online IT Training. <https://www.ituonline.com/tech-definitions/what-is-an-external-network/>

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| Name: Kyle Walker |
| Role within Project: Research, Editor, Writer |
| Time spent on Project: Jan 8th - 10:30AM – 12:30PM  Jan 10th – 10:30AM – 11:30AM  Jan 13th – 10:30PM – 12:30PM  Jan 14th – 8:30AM – 10:30AM |
| Contributions to Project: Jan 10th – Installed the server with Liam  Jan 13th – Continued working on the server, installing via remote access  Jan 14th – Installed and configured server roles |

Refences used:

**Marking Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 4 | 3 | 2 | 1 | 0 |
| **ATTENDANCE**    **20%** | 100% - 90% of  meetings attended | 89% - 60% of  meetings attended | 59% - 40% of meetings attended | 39% - 10% of meetings attended | 9% - 0% of meetings attended |
| **COMMUNICATION**    **20%** | Consistent and concise communication with the team | Clear communication with the team, but lacks consistency | Confusing, and inconsistent communication with the team | Some effort for communication, but lacks consistency and clearness | No effort made for communication |
| **DEADLINES**    **20%** | Deadline met with 24 hours to spare until due | Deadline met with 12 hours to spare until due | Deadline met with 8 hours to spare until due | Deadline met with 1hour to spare until due | Deadline missed |
| **WORKLOAD**    **20%** | Completed 100% - 80% of assigned work | Completed 79% - 60% of assigned work | Completed 59% - 50% of assigned work | Completed 49% - 30% of assigned work | Completed 29% or less of assigned work |
| **QUALITY OF WORK**    **20%** | Full effort spent on the project, research applied to the project, as well as complete references. | Good amount of effort was given, most references completed with research applied to the project. | Mediocre effort, some references given; with a lack of research applied to the project. | Some effort given, with little references, as well as little research applied | No attempt to give effort, no references, as well as no research attempted |

**Jack Gordon**

Jack Gordon

|  |  |
| --- | --- |
| Attendance | 2 |
| Communication | 3 |
| Deadlines | 1 |
| Workload | 3 |
| Quality of Work | 3 |

Total:12

Liam Butler

|  |  |
| --- | --- |
| Attendance | 4 |
| Communication | 4 |
| Deadlines | 3 |
| Workload | 4 |
| Quality of Work | 3 |

Total:18

Kyle Walker

|  |  |
| --- | --- |
| Attendance | 2 |
| Communication | 4 |
| Deadlines | 3 |
| Workload | 4 |
| Quality of Work | 4 |

Total:17

**Liam Butler**

Jack Gordon

|  |  |
| --- | --- |
| Attendance |  |
| Communication |  |
| Deadlines |  |
| Workload |  |
| Quality of Work |  |

Liam Butler

|  |  |
| --- | --- |
| Attendance |  |
| Communication |  |
| Deadlines |  |
| Workload |  |
| Quality of Work |  |

Kyle Walker

|  |  |
| --- | --- |
| Attendance |  |
| Communication |  |
| Deadlines |  |
| Workload |  |
| Quality of Work |  |

**Kyle Walker**

Jack Gordon

|  |  |
| --- | --- |
| Attendance | 4 |
| Communication | 4 |
| Deadlines | 4 |
| Workload | 3 |
| Quality of Work | 4 |

Total: 19

Liam Butler

|  |  |
| --- | --- |
| Attendance | 4 |
| Communication | 2 |
| Deadlines | 3 |
| Workload | 2 |
| Quality of Work | 3 |

Total: 14

Kyle Walker

|  |  |
| --- | --- |
| Attendance | 2 |
| Communication | 4 |
| Deadlines | 3 |
| Workload | 4 |
| Quality of Work | 4 |

Total: 17