

Rapid Ascent Assignments

Rubric

<Passing 80>	100	80	60	40
Meets Task Requirements	All	Most	Some	Very Few or None
Frequency	Always	Usually	Some of the Time	Rarely or None
Accuracy	No Errors	Few Errors	Some Errors	Frequent Errors
Comprehensibility	Always Comprehensible	Almost Always Comprehensible	Gist and Main Ideas Comprehensible	Isolated Bits are Comprehensible
Content Coverage	Fully Developed	Adequately Developed	Partially Developed	Minimally Developed
Cybersecurity Vocabulary	Broad and Varied	Adequate and Varied	Limited / Lacks Variety	Basic / Highly Repetitive

The above are in % points.

ASSIGNMENTS - Virtualization

- **Virtualization** Assignment #1 – Virtualization Concepts
 - Tasks
 - Explain the different types of virtualization
 - Purpose
 - Clarify – Distinguish between Type I, Type II hypervisors, and Containers
 - Summarize – Be able to explain each type of virtualization
 - Assignment
 - In a text box
 - Explain virtualization in your own words, the different types, its purpose.

- **Virtualization** Assignment #2 – Virtualization Concepts
 - Tasks
 - Explain the different types of virtualization features
 - Purpose
 - Clarify – Distinguish between
 - Resource Allocation
 - Isolation
 - Snapshotting
 - Live Migration
 - Cloning
 - Summarize – Be able to explain each type of virtualization feature
 - Assignment
 - In a text box
 - Explain the list of virtualization features provided above in your own words and its purpose.

- **Virtualization** Assignment #3 – Virtualization Concepts – Golden Image
 - Tasks
 - Explain what a Golden Image is, and how it's used
 - Purpose
 - Summarize – Be able to explain what a Golden Image is
 - Assignment
 - In a text box
 - Explain what a Golden Image is, and how it's used in your own words.

- **Virtualization** Assignment #4 – Virtualization Concepts – ISO File
 - Tasks
 - Explain what an ISO File is, and how it's used
 - Purpose
 - Summarize – Be able to explain what an ISO File is
 - Assignment
 - In a text box
 - Explain what an ISO File is, and how it's used in your own words.

- **Virtualization** Assignment #5– Live Class Exercise – Deploy Ubuntu 22.04 Linux Server (NO GUI)
 - Tasks
 - Deploy an Ubuntu 22.04 Linux Server in VirtualBox
 - Purpose
 - Apply – Using the in class guidance, install and deploy a Linux Server
 - Construct – Build a Virtual Machine
 - Assignment
 - Show Screenshots of
 - The Instructions you followed
 - Each step of the Installation process
 - Linux Server native commands and outputs
 - In a text box
 - Explain in your own words encryption, each step, what it means and what you accomplished.

- **Virtualization** Assignment #4 – Live Class Exercise – Discovery
 - Tasks
 - Demonstrate switching Virtual Network Modes in VirtualBox
 - Purpose
 - Clarify – Discover the difference between NAT and Bridged Modes
 - Apply – Be able to modify Network Modes in VirtualBox
 - Assignment
 - Show Screenshots of
 - The Instructions you followed
 - Each Step of the Process
 - The changes that occurred in Linux, especially the IP Addresses
 - In a text box
 - Explain in your own words Network Modes, its purpose, and the experience of using VirtualBox to change the virtual location of the Virtual Linux Server in your systems.