

Detailed Curriculum

Name of Unit of Qualification: Understanding Fundamentals of Linux Systems and User account management

Duration: 25 Hrs.

OUTCOME	Contents	Hrs.
Demonstrate proficiency with the Linux command line interface, directory/file management techniques, file system organization, and tools commonly found on most Linux distributions.	<ul style="list-style-type: none">• Fundamentals of UNIX & Linux Systems: Covers the history of UNIX & Linux, comparison of distributions, installation, navigation of the file system, the command line interface, piping, standard input/output redirection, basic text editors and common tools, shell scripting, storage management, process management, and booting up/shutting down.• User account management: Instructs how to add/modify/remove users & groups, modify UNIX permissions, set password & account policies, create access controls, monitor account activity, and set resource limits.	25

Name of Unit of Qualification: Understanding Networking Administration

Duration: 20 Hrs.

OUTCOME	Contents	Hrs.
Effectively operate a Linux system inside of a network environment to integrate with existing service solutions and/or provide its own such as DHCP, DNS, Routing, Network Address Translation, and NTP.	Reviews the fundamentals of networking and the TCP/IP model, teaches how to remotely administer a large amount of UNIX machines, configure, maintain and troubleshoot essential network services, set up routing, VPN tunnels, and networked file systems.	20

Name of Unit of Qualification: Understanding Software & Configuration Management

Duration: 15 Hrs.

OUTCOME	Contents	Hrs.
Apply configuration management techniques to track modifications made by system administrators over time, and identify	Teaches various practices to manage software packages, application updates, to track modifications to system configuration over time, and automate the system installation process.	15

discrepancies with system configuration		
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Name of Unit of Qualification: Understanding Logging, Performance Analysis, and System Monitoring

Duration: 10 Hrs.

OUTCOME	Contents	Hrs.
Identify key performance metrics related to system performance, and routinely collect information on a Linux system to ensure that a given level of service is being met, and system resources are being utilized appropriately.	Provides an overview of metrics related to system performance, teaches how to analyze and store log files, set up tools to routinely monitor for important events, create automated notifications when system or services are unavailable, and conduct analysis to resolve performance issues.	10

Name of Unit of Qualification: Understanding Linux Troubleshooting

Duration: 10 Hrs.

OUTCOME	Contents	Hrs.
Demonstrate the ability to troubleshoot challenging technical problems typically encountered when operating and administering Linux systems.	Troubleshooting Methodology, Troubleshooting Tools, Rescue Environments.	10