NISGTC DOL Linux+ Supported Labs (Series 1)

Lab	Title	Linux+ Domain	Pod Required	Tasks Included
1a	CentOS Server Linux Installation	Linux Installation and Package Management	Linux+ Install	• Install CentOS using a default hard disk layout. • Make configuration changes to modify the CentOS GRUB menu
1b	Ubuntu Desktop Linux Installation	Linux Installation and Package Management	Linux+ Install	• Install Ubuntu using a custom hard disk layout. • Make configuration changes to modify the Ubuntu GRUB 2 menu
2	Installing Packages and Shared Libraries on Fedora and Ubuntu	Linux Installation and Package Management	Linux+ Base	• Using ldd and ldconfig to list shared libraries • Using apt-get to install and upgrade debian packages • Installing, upgrading and erasing packages using RPM • Installing, upgrading and removing packages using YUM
3	Displaying Hardware	System Architecture	Linux+ Base	• Use hardware commands to display system hardware • View device files in /dev and understand the basics of udev. • Explore the /proc and /sys filesystems
4	Adding a New Partition	Devices, Linux Filesystems, Filesystems Hierarchy Standard	Linux+ Base	• Creating new Linux partitions • Formatting partitions using mkfs • Display filesystem information • Using fsck to maintain filesystem integrity

Lab	Title	Linux+ Domain	Pod Required	Tasks Included
				• Mounting new partitions • Create a swap filesystem
5	Creating filesystem Quotas	Devices, Linux Filesystems, Filesystems Hierarchy Standard	Linux+ Base	• Preparing a filesystem for quotas • Implementing filesystem quotas • Filesystem quota reporting
6	Booting and Restarting the System	System Architecture	Linux+ Base	• Watching the boot sequence and entering the grub menu • Editing the default runlevel using symlinks • Terminating processes and shutting down the system
7a	Using the BASH Shell	GNU and UNIX Commands	Linux+ Base	• Explore BASH features such as man pages and history • List the contents of directories, including using file globbing • Copying, moving, and removing files and directories
7b	Using the BASH Shell	GNU and UNIX Commands	Linux+ Base	• Perform shell redirection • Search for files on the system
7c	Using the BASH Shell	GNU and UNIX Commands	Linux+ Base	• Create archive files using tar, cpio and dd • Compress and uncompress files using gzip, gunzip and bzip2
7d	Using the BASH Shell	GNU and UNIX Commands	Linux+ Base	• Use various commands to display the contents of text files

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				• Use various commands to modify the contents of text files
8	Monitoring Processes	GNU and UNIX Commands	Linux+ Base	• Starting background and foreground processes • Using top to view and renice processes • Starting processes using nice • Using pkill and kill to kill processes • Using ps to select and sort processes • Using nohup to execute a process • Using free and uptime to view system statistics
9	Working with Files	Devices, Linux Filesystems, Filesystems Hierarchy Standard	Linux+ Base	• Changing group ownership and file ownership • Viewing default file permissions • Changing file permissions using chmod • Changing the system umask • Managing symbolic and hard links • Locating commands
10a	Managing Text Files	GNU and UNIX Commands	Linux+ Base	• Using the vi editor for basic file editing
10b	Managing Text Files	GNU and UNIX Commands	Linux+ Base	• Using gedit and nano for basic file editing
10c	Managing Text Files	GNU and UNIX Commands	Linux+ Base	• Using commands to search and modify text within files

NISGTC DOL Linux+ Supported Labs (Series 2)

Lab	Title	Linux+ Domain	Tasks Included
1	Configuring X Windows in CentOS and Fedora Desktop	User Interfaces and Desktops	• Generate an xorg.conf file in CentOS. • Running GUI commands on a remote host • Configure Display Managers in CentOS
2	Accessibility Technologies	User Interfaces and Desktops	• Generate a xorg.conf file in CentOS • Run GUI commands on a remote host • Configure Display Managers in CentOS
3	Users and Group Accounts	Administrative Tasks	• Explore user and group databases • Create and modify group accounts • Create and modify user accounts, including password aging policies • Create special accounts
4a	System Administration Tasks	Essential System Services	• View and modify both the operating system clock and hardware clock • Configure a basic NTP client
4b	System Administration Tasks	Essential System Services	• View system logs • Administer the system log configuration file
4c	System Administration Tasks	Essential System Services	• Explore the CUPS configuration files • Add a CUPS printer • Manage the print queue
5	crontab and at	Administrative Tasks	• Learn how to schedule future tasks with the at command • Limit access to the at command • Learn how to schedule future recurring tasks with the crontab command • Limit access to the crontab command

Lab	Title	Linux+ Domain	Tasks Included
6	Configuring Locale and Time Zone Settings	Administrative Tasks	• Manage system crontabs. • View and modify locale settings • View and modify time zone settings
7a	Working with Email	Essential System Services	• Viewing Postfix files • Starting and stopping Postfix services
7b	Working with Email	Essential System Services	• Customizing mail aliases • Set up mail forwarding
8	Basic Network Configuration	Networking Fundamentals	• View, change and verify network configuration settings.
9	Basic Security Administration	Security	• Security administration tasks to ensure security
10a	Securing Data with Encryption	Security	• SSH GnuPG to secure data with encryption
10b	Host Security	Security	• Establish host security to alleviate vulnerability of network services
11a	BASH Shell Features	Shells, scripting, and data management	• Create and modify shell variables, both local and environment, and modify initialization files • Create and use aliases and functions
11b	BASH Scripting	Shells, scripting, and data management	• Create simple shell scripts • Create shell scripts with conditional execution
12	Working with a SQL Database	Shells, scripting, and data management	• Query and modify data using SQL