

Adji - Sénégal - 35 heures

Cursus

- **File Hierarchy System** - 1 hour
 - Directory Contents
 - Directory Structure
 - File Types
 - The mount command
 - Command Line Switches
 - The /etc/fstab file
 - Understanding the /etc/fstab file
 - Mountpoint Options
 - The umount command
 - Command Line Switches
 - Unix File Systems
 - Superblock
 - Inodes
 - Data Blocks
 - Hard (Physical) Links
 - Soft (Symbolic) Links
 - **Commands:** mount, umount.
 - **The Visual Editor** - 1 hour
 - Presentation
 - Creating, Opening and Closing files with VI
 - Commands
 - LAB #1 - Creating a new file with VI
 - LAB #2 - Opening a file in read-only mode using view
 - LAB #3 - Opening a file in read-write mode using VI
 - The set Command
 - Commands
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- LAB #4 - Turning on line numbering using set
 - Moving around within the file
 - Commands
 - Inserting Text
 - Commands
 - LAB #5 - Inserting text
 - Searching for Text
 - Commands
 - LAB #6 - Searching for and replacing text
 - Deleting Text
 - Commands
 - LAB #7 - Deleting lines
 - Copy, Cut and Paste
 - Commands
 - LAB #8 - Copying, Cutting and pasting text
 - Configuring a Personalised Interface
 - **Commands:** view, vi
- **Basic Shell Commands and Text Manipulation Tools** - 3 hours
 - Use of Basic Shell Commands
 - The stty Command
 - Command Line Switches
 - The date command
 - Command Line Switches
 - The who Command
 - Command Line Switches
 - The df Command
 - Command Line Switches
 - The free Command
 - Command Line Switches
 - The whoami Command
 - Command Line Switches
 - The pwd Command
 - Command Line Switches
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- The cd Command
 - Command Line Switches
 - The ls Command
 - Command Line Switches
 - The find Command
 - Command Line Switches
 - The touch Command
 - Command Line Switches
 - The echo Command
 - Command Line Switches
 - The cp Command
 - Command Line Switches
 - The file Command
 - Command Line Switches
 - The cat Command
 - Command Line Switches
 - The mv Command
 - Command Line Switches
 - The mkdir Command
 - Command Line Switches
 - The rmdir Command
 - Command Line Switches
 - The rm Command
 - Command Line Switches
 - The sort Command
 - Command Line Switches
 - The more Command
 - Command Line Switches
 - The less Command
 - Command Line Switches
 - The find Command
 - Command Line Switches
 - The su Command
 - Command Line Switches
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- The updatedb and locate Commands
 - Command Line Switches
- The whereis Command
 - Command Line Switches
- The which Command
 - Command Line Switches
- The uptime Command
 - Command Line Switches
- The w Command
 - Command Line Switches
- The uname Command
 - Command Line Switches
- The du Command
 - Command Line Switches
- The clear Command
- The exit Command
 - Command Line Switches
- The logout Command
 - Command Line Switches
- The sleep Command
 - Command Line Switches
- The wall Command
- The seq Command
 - Command Line Switches
- The screen Command
 - Command Line Switches
- Switches and Arguments
- Manipulating Text Files
 - Regular Expressions
 - BREs
 - EREs
 - Text-search Utilities
 - The grep Command
 - Command Line Switches

- The egrep Command
 - Command Line Switches
 - The fgrep Command
 - LAB #1 - Using grep, egrep and fgrep
 - The Stream EDitor SED
 - Command Line Switches
 - LAB #2 - Using sed
 - The Text Processor AWK
 - Presentation
 - Field Separation
 - Conditions
 - A regular expression applied to a record
 - A regular expression applied to a field
 - Comparisons
 - Logical Operators
 - Built-in Variables
 - Awk Scripts
 - The printf function
 - Control Statements
 - if
 - for
 - while
 - do-while
 - Command Line Switches
 - LAB #3 - Using awk
 - Other Useful Commands
 - The expand Command
 - Command Line Switches
 - La Commande unexpand
 - Command Line Switches
 - The cut command
 - Command Line Switches
 - The uniq Command
 - Command Line Switches
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- The tr Command
 - Command Line Switches
 - The paste Command
 - Command Line Switches
 - The split Command
 - Command Line Switches
 - The diff Command
 - Command Line Switches
 - The cmp Command
 - Command Line Switches
 - The patch Command
 - Command Line Switches
 - The strings Command
 - Command Line Switches
 - The comm Command
 - Command Line Switches
 - The head Command
 - Command Line Switches
 - The tail Command
 - Command Line Switches
 - LAB #4 - Use the grep, tr and cut to extract your IP address from the output of ifconfig
 - **Commands:** stty, date, who, df, free, whoami, pwd, cd, ls, touch, echo, cp, file, cat, mv, mkdir, rmdir, rm, sort, more, find, su, locate, updatedb, whereis, which, uptime, w, uname, du, lsmdu, modprobe, rmmdu, modinfo, clear, exit, logout, sleep, grep, egrep, fgrep, sed, awk, tr, paste, cut, split, diff, cmp, uniq, patch, strings, comm, od, head, tail, wall, screen.
- **Command Line Interface** - 3 hours
 - The Shell
 - /bin/bash
 - Internal And External Commands
 - Aliases
 - The Prompt
 - The history Command
 - The TAB key
 - Metacharacters
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- The * Metacharacter
- The ? Metacharacter
- The [] Metacharacter
- The extglob Option
- ?(expression)
- *(expression)
- +(expression)
- @(expression)
- !(expression)
- Protecting Metacharacters
- Exit Status
- Redirections
- Pipes
- Command Substitution
- Conditional Command Execution
- Environment Variables
 - Principal Variables
 - Internationalisation and Localisation
 - Special Variables
 - The env Command
- Bash Shell Options
 - noclobber
 - noglob
 - nounset
- Basic Shell Scripting
 - Execution
 - The read command
 - Code de retour
 - The IFS Variable
 - The test Command
 - Testing Files
 - LAB #1
 - Testing Strings
 - LAB #2

- Testing Numbers
 - LAB #3
 - Expressions
 - LAB #4
 - Testing the User Environment
 - LAB #5
 - The [[expression]] Command
 - LAB #6
 - Shell Operators
 - LAB #7
 - The expr Command
 - Maths
 - Comparisons
 - Logic
 - LAB #8
 - The let Command
 - Maths
 - Comparisons
 - Logic
 - Binary
 - LAB #9
 - Control Structures
 - If
 - case
 - Loops
 - for
 - while
 - Example
 - Start-up Scripts
 - LAB #10
 - ~/.bash_profile
 - ~/.bashrc
 - **Commands:** type, alias, unalias, chsh, history, wc, tee, set, vi, script, read, test, expr, let, if, case, for, while.
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- **Managing Users and Groups** - 2 hours

- Groups
- Users
- Commands
 - Groups
 - groupadd
 - groupdel
 - groupmod
 - newgrp
 - gpasswd
 - Users
 - useradd
 - userdel
 - usermod
 - passwd
- Configuration
- LAB #1 - Managing Groups and Users
- su et su -
- sudo
- **Commands** : getent, grpck, grpconv, grpunconv, pwck, pwconv, pwunconv, groupadd, groupdel, groupmod, newgrp, gpasswd, useradd, userdel, usermod, passwd, id, groups, su, sudo.

- **Package Management** - 2 hours

- Compiling Software the Old Way
 - ./configure
 - make
 - make check
 - make install
 - The rpm command
 - Yellow Dog Updater Modified
 - Configuration
 - Repositories
 - Usage
 - LAB #1 - Working with Yum
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- The yumdownloader command
 - Shared Libraries
 - Presentation
 - Introduction
 - Shared Object Locations
 - ld-linux.so.2
 - The ldd Command
 - The /etc/ld.so.conf File
 - The ldconfig Command
 - **Commands** : rpm, yum, yumdownloader, mc, wget, configure, make, ldd, ldconfig.
 - **Managing File Permissions** - 2 hours
 - Preparation
 - Basic Unix File Permissions
 - Changing Permissions with chmod
 - Symbolic Mode
 - Octal Mode
 - The umask command
 - Changing the Owner or the Group with chown and chgrp
 - Advanced Unix Permissions
 - SUID/SGID bit
 - Inheritance Flag
 - Sticky bit
 - ACLs
 - Command Line Switches
 - Ext2/Ext3/Ext4 Attributes
 - **Commands** : chmod, umask, chown, chgrp, setfacl, getfacl, chattr, lsattr.
 - **Managing Disks and Swap Space** - 2 hours
 - Block Devices
 - Partitions
 - Master Boot Record
 - Apple Partition Map
 - GUID Partition Table
 - Partitioning
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- LAB #1 - Using fdisk and parted
 - Journalized Filesystems
 - Presentation
 - Ext3
 - Ext4
 - Swap Space
 - Swap Size
 - Swap Partitions
 - The swapon Command
 - The swapoff Command
 - The /etc/fstab file
 - Swap Files
 - **Commands** : fdisk, gdisk, parted, swapon, swapoff, mkswap, dumpe2fs, tune2fs, mke2fs, mkfs.ext3, e2fsck, resize2fs, debugfs, e2label, mkfs.ext4.
 - **Process Scheduling** - 1 hour
 - cron
 - anacron
 - at
 - **Commands** : cron, anacron, at.
 - **Process Management** - 2 hours
 - Process Types
 - Process priorities
 - Synchronous and Asynchronous
 - Process Commands
 - The ps Command
 - The pstree Command
 - The top Command
 - The fg and bg Commands
 - The wait Command
 - The nice Command
 - The renice Command
 - The nohup Command
 - The kill Command
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- **Commands** : ps, pstree, top, fg, bg, wait, nice, renice, nohup, kill.

- **Managing Logs** - 2 hours

- The /var/log/messages file
- The /bin/dmesg Command
- The /var/log/audit/audit.log file
 - Managing Audit Events
 - auditd
 - auditctl
 - audispd
 - Viewing Audit Events
 - The aureport Command
 - The ausearch Command
- Applications
- rsyslog
 - Priorities
 - Facilities
 - /etc/rsyslog.conf
 - Modules
 - Global Directives
 - Rules
 - Facility.Priority
 - Facility!Priority
 - Facility=Priority
 - Using the * Wildcard
 - n Facilities with Identical Priorities
 - n Selectors with Identical Actions
- /usr/bin/logger
- /usr/bin/logrotate
- **Commands** : dmesg, auditd, auditctl, audispd, aureport, ausearch, rsyslog, logger.

- **System Startup and Shutdown** - 4 hours

- System Startup
 - Boot Loader
 - BIOS Systems

- EFI Systems

- GRUB
 - GRUB LEGACY on RHEL 6
- Initramfs
 - The dracut Command
- Kernel Booting Process
- SysVinit startup process
 - The Init Process
 - RUNLEVELS
 - Unix System V Startup Scripts
 - Inittab
 - The /etc/init.d directory
 - The rcX.d Directories
 - The update-rc.d Command
 - The chkconfig Command
- Upstart startup process
 - System Initialisation
 - Runlevels
 - [CTL]-[ALT]-[DEL]
 - mingetty
 - rc.sysinit
 - The /etc/rc.d/init.d Directory
 - The /etc/rc.d/rcX.d Directories
 - Managing Upstart services
- System Shutdown
 - The shutdown Command
 - The reboot command
 - The halt Command
 - The poweroff Command
- **Commands** : grub_install, runlevel, init, telinit, chkconfig, dracut, initctl, start, stop, restart, systemctl, systemd-analyze, shutdown, halt, reboot, poweroff.

- **Managing Integrated Peripherals** - 3 hours

- Special Files
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- Commands
 - The lspci Command
 - The lsusb Command
 - The dmidecode Command
 - The /proc Directory
 - Sub-directories
 - ide/scsi
 - acpi
 - bus
 - net
 - sys
 - The sysctl Command
 - Files
 - /proc/cpuinfo
 - /proc/interrupts
 - /proc/dma
 - /proc/ioports
 - /proc/devices
 - /proc/modules
 - /proc/diskstats
 - /proc/partitions
 - /proc/swaps
 - /proc/loadavg
 - /proc/meminfo
 - /proc/version
 - Interpreting Information in /proc
 - Commands
 - free
 - uptime or w
 - iostat
 - vmstat
 - mpstat
 - sar
 - Production Environments
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- Identifying a System with a CPU Bottleneck
 - Identifying a Memory Problem
 - Identifying I/O Bottlenecks
 - USB Modules
 - udev
 - The udevadm Command
 - The /sys Filesystem
 - Planning resources - the collectd command
 - Limiting Resources
 - ulimit
 - **Commands:** lspci, lsusb, dmidecode, free, uptime, w, iostat, vmstat, mpstat, sar, udevadm, collectd, sysctl.
- **Managing a the Network** - 5 hours
 - Communication models
 - OSI
 - NDIS and ODI
 - TCP/IP
 - Messages, Datagrams and Segments
 - Establishing a TCP connection
 - The TCP header
 - The UDP header
 - Fragmentation and Re-encapsulation
 - TCPv4 Classes
 - Subnet Masks
 - Variable Length Subnet Masks - VLSM
 - Ports and sockets
 - Configuring a Network Client under Linux
 - /etc/services
 - Ethernet address resolution with arp
 - Configuring TCP/IP on RHEL 6
 - DHCP
 - /etc/sysconfig/network
 - /etc/sysconfig/network-scripts/ifcfg-ethX (où X=0,1 ...)
 - Fixed IP Address
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- /etc/sysconfig/network
 - /etc/sysconfig/network-scripts/ifcfg-ethX (où X=0,1 ...)
 - The hostname command
 - The ifconfig command
 - Manually bringing up and down a network interface
 - The /etc/networks file
 - IP address resolution
 - /etc/resolv.conf
 - /etc/nsswitch.conf
 - /etc/hosts
 - Network Services
 - xinetd
 - TCP Wrapper
 - Network Diagnostic Commands
 - ping
 - ping6
 - netstat-i
 - traceroute
 - traceroute 6
 - tracepath6
 - Static Routing Tables on RHEL 6
 - The route Command
 - The netstat Command
 - Turning routing ON/OFF
 - Remote Administration
 - Telnet
 - ssh
 - wget
 - ftp
 - scp
 - Packet Sniffers
 - TCPdump
 - Wireshark
 - Port Scanners
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- nmap
- netcat
- The Netfilter Firewall
 - Introduction
 - Configuration using scripts on RHEL 6
- Cryptologie
 - GnuPG
 - Public Key Infrastructures
 - X509 Certificates
 - SSH and SCP
 - SSH Tunneling
- **Commands** : netstat, arp, nslookup, dig, ifconfig, ifup, ifdown, ifstatus, NetworkManager, hostname, uname, ping, ping6, Traceroute, Traceroute6, Tracepath6, tcpd, xinetd, route, ntpd, telnet, wget, ftp, tcpdump, wireshark, nmap, netcat, iptables, gpg, ssh, scp.
- **Mail, SQL and Quotas** - 2 hours
 - Mail Transfer Agent (MTA) basics
 - SendMail
 - SQL data management
 - Quotas
 - **Commands** : sendmail, common SQL commands, quotacheck, edquota, repquota, quota, warnquota.

Programme

- **Système de Fichiers** - 1 heure.
 - Linux File Hierarchy System
 - L'organisation
 - La commande mount
 - La commande umount
 - Systèmes de fichiers Unix
 - Validation des acquis
 - **Commandes** : mount, umount.
- **L'Editeur VI** - 1 heure.

- Présentation
- Lancer et Quitter VI
- Set
- Commandes du Curseur
- Insertion de Texte
- Recherche de Texte
- Suppression de Texte
- Copier - Coller
- Couper - Coller
- En cas de problème
- Validation des acquis
- **Commandes** : view, vi.

- **Commandes de Base et Outils de Manipulation de Fichiers Textes** - 3 heures.

- Etude des commandes de base
 - Options et arguments
 - Expressions Régulières
 - Expressions régulières basiques
 - Expressions régulières étendues
 - Outils et Commandes sur les Fichiers
 - La commande grep
 - La commande egrep
 - La commande fgrep
 - La commande sed
 - La commande awk
 - La commande tr
 - La commande paste
 - La commande cut
 - La commande uniq
 - La commande split
 - La commande diff
 - La commande cmp
 - La commande patch
 - La commande strings
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- La commande comm
 - La commande head
 - La commande tail
 - La commande screen
 - La commande wall
 - Validation des acquis
 - **Commandes** : stty, date, who, df, free, whoami, pwd, cd, ls, touch, echo, cp, file, cat, mv, mkdir, rmdir, rm, sort, more, find, su, locate, updatedb, whereis, which, uptime, w, uname, du, lsmdu, modprobe, rmmdu, modinfo, clear, exit, logout, shutdown, reboot, halt, poweroff, sleep, grep, egrep, fgrep, sed, awk, tr, paste, cut, split, diff, cmp, uniq, patch, strings, comm, od, head, tail, screen, wall.
 - **La Ligne de Commande** - 3 heures.
 - Le Shell
 - Les Commandes Internes et Externes au shell
 - Les alias
 - Le Prompt
 - Rappeler des Commandes
 - Générer les fins de noms de fichiers
 - Le shell interactif
 - Affichage des variables du shell
 - Les variables principales
 - Régionalisation et Internationalisation
 - Options du shell bash
 - Les Scripts Shell
 - Exécution
 - Les variables spéciales
 - La commande read
 - Code de retour
 - La variable IFS
 - La commande test
 - La commande [[expression]]
 - Opérateurs du shell
 - L'arithmétique
 - La commande expr
 - La commande let
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- Structures de contrôle
 - Boucles
 - Scripts de Démarrage
 - Validation des acquis
 - **Commandes** : type, alias, unalias, chsh, history, wc, tee, set, vi, script, read, test, expr, let, if, case, for, while.
 - **Gestion des Utilisateurs** - 2 heures.
 - Groupes
 - Utilisateurs
 - Commandes
 - LAB #1 - Gestion des Utilisateurs
 - su et su -
 - sudo
 - Validation des acquis
 - **Commandes** : grpck, grpconv, grpunconv, pwck, pwconv, pwunconv, groupadd, groupdel, groupmod, newgrp, gpasswd, useradd, userdel, usermod, passwd, id, groups, su, sudo.
 - **Gestion des Paquets** - 2 heures.
 - Installer à partir des sources
 - La commande rpm
 - La commande yum
 - La commande yumdownloader
 - LAB #1 - Gestion des Paquets
 - Les Bibliothèques Partagées
 - La Commande ldd
 - Le fichier /etc/ld.so.conf
 - La Commande ldconfig
 - Validation des acquis
 - **Commandes** : rpm, yum, yumdownloader, mc, wget, configure, make, ldd, ldconfig.
 - **Gestion de Droits** - 2 heures.
 - Les Droits Unix Simples
 - La Modification des Droits
 - Modifier le propriétaire ou le groupe
 - Les Droits Unix Etendus
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- Les ACL
 - Les Attributs Ext2/Ext3/Ext4
 - Validation des acquis
 - **Commandes** : chmod, umask, chown, chgrp, setfacl, getfacl, chattr, lsattr.
 - **Gestion des Disques, des Systèmes de Fichiers et du Swap** - 2 heures.
 - Périphériques de stockage
 - Partitionnement
 - Systèmes de Fichiers Journalisés
 - Présentation
 - Ext3
 - Ext4
 - Pagination
 - Taille du swap
 - Partitions de swap
 - Fichiers de swap
 - La commande swapon
 - La commande swapoff
 - Le fichier /etc/fstab
 - Validation des acquis
 - **Commandes** : fdisk, gdisk, parted, swapon, swapoff, mkswap, dumpe2fs, tune2fs, mke2fs, mkfs.ext3, e2fsck, resize2fs, debugfs, e2label, mkfs.ext4.
 - **Gestion des Tâches** 1 heure.
 - cron
 - anacron
 - at
 - Validation des acquis
 - **Commandes** : crond, crontab, anacron, at.
 - **Gestion des Processus** - 2 heures.
 - Les Types de Processus
 - Les Commandes relatives aux Processus
 - Synchrone vs Asynchrone
 - Priorités de processus
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- Validation des acquis
- **Commandes** : ps, pstree, pgrep, top, fg, bg, wait, nice, renice, nohup, kill, pkill, fuser.

- **Gestion de la Journalisation** - 2 heures.

- Le fichier /var/log/messages
- Surveillance Sécuritaire
 - La commande last
 - La commande lastlog
 - La Commande faillog
 - /var/log/secure
- La commande /bin/dmesg
- Le fichier /var/log/audit/audit.log
 - Gestion des évènements audit
 - auditd
 - auditctl
 - audispd
 - La consultation des évènements audit
 - La commande aureport
 - La commande ausearch
- Applications
- rsyslog
 - Priorités
 - Sous-systèmes applicatifs
 - /etc/rsyslog.conf
 - Modules
 - Directives Globales
 - Règles
 - Sous-système applicatif.Priorité
 - Sous-système applicatif!Priorité
 - Sous-système applicatif=Priorité
 - L'utilisation du caractère spécial *
 - n Sous-systèmes avec la même priorité
 - n Sélecteurs avec la même Action
 - /usr/bin/logger

- Options de la commande
 - /usr/sbin/logrotate
 - Options de la commande
- Validation des acquis
- **Commandes** : dmesg, auditd, auditctl, audoispd, aureport, ausearch, rsyslog, logger, logrotate.
- **Gestion du Démarrage et de l'Arrêt du Système** - 4 heures.
 - Détail du démarrage
 - Systèmes à base du BIOS
 - Systèmes EFI
 - Autres Systèmes
 - Gestionnaire d'amorçage
 - LILO
 - Grub Legacy sous RHEL 6
 - Le fichier menu.lst
 - Configurer l'Authentification
 - Modifier la Configuration de GRUB Legacy en Ligne de Commande
 - Initramfs
 - Examiner l'image existante
 - Le script init
 - Créer un Initial Ram Disk
 - La commande dracut sous RHEL
 - Le Démarrage du Noyau
 - Le Processus Init
 - Le Système de Démarrage SysVinit sous RHEL 5
 - Niveaux d'exécution sous RHEL 5
 - Scripts de Démarrage
 - rc.sysinit sous RHEL
 - Scripts Unix Système V sous RHEL 5
 - inittab
 - Répertoire init.d
 - Répertoires rcX.d
 - Linux Standard Base
 - La commande chkconfig sous RHEL 5

- La Gestion des Services sous SysVinit
 - Le Système de Démarrage Upstart sous RHEL 6
 - Scripts Upstart
 - Initialisation du Système
 - Runlevels
 - [CTL]-[ALT]-[DEL]
 - mingetty
 - La Gestion des Services sous Upstart
 - Arrêt Système du Système
 - La commande shutdown
 - La commande reboot
 - La commande halt
 - La commande poweroff
 - Validation des acquis
 - **Commandes** : grub_install, grub2-mkconfig, runlevel, init, telinit, chkconfig, dracut, initctl, start, stop, restart, shutdown, halt, reboot, poweroff.
- **Gestion des Paramètres et les Ressources du Matériel** - 3 heures.
 - Fichiers Spéciaux
 - Commandes
 - La Commande lspci
 - La Commande lsusb
 - La Commande dmidecode
 - Répertoire /proc
 - Répertoires
 - ide/scsi
 - acpi
 - bus
 - net
 - sys
 - La commande sysctl
 - Options de la commande
 - Fichiers
 - Processeur
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- Interruptions système
 - Canaux DMA
 - Plages d'entrée/sortie
 - Périphériques
 - Modules
 - Statistiques de l'utilisation des disques
 - Partitions
 - Espaces de pagination
 - Statistiques d'utilisation du processeur
 - Statistiques d'utilisation de la mémoire
 - Version du noyau
 - Interprétation des informations dans /proc
 - Commandes
 - free
 - uptime ou w
 - iostat
 - vmstat
 - mpstat
 - sar
 - Utilisation des commandes en production
 - Identifier un système limité par le processeur
 - Identifier un système ayant un problème de mémoire
 - Identifier un système ayant un problème d'E/S
 - Modules usb
 - udev
 - La commande udevadm
 - Les options de la commande
 - Système de fichiers /sys
 - Limiter les Ressources
 - Prévoir des Besoins en Ressources
 - La commande collectd
 - Validation des acquis
 - **Commandes** : netstat, pstree, w, lsof, free, top, uptime, lspci, lshw, dmidecode, free, uptime, w, iostat, vmstat, hdparm, mpstat, sar, udevadm, collectd, sysctl.
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- **Gestion du Réseau** 5 heures.

- Introduction
 - Modèles de Communication
 - Message/Datagramme/Segment
 - Etablissement de la connexion TCP
 - En-tête TCP
 - En-tête UDP
 - Fragmentation et Ré-encapsulation
 - Adressage
 - Masques de sous-réseaux
 - VLSM
 - Ports et sockets
- Configuration du Réseau sous RHEL 5 et 6
 - Configuration de TCP/IP
 - DHCP
 - /etc/sysconfig/network
 - /etc/sysconfig/network-scripts/ifcfg-ethX (où X=0,1 ...)
 - IP Fixe
 - /etc/sysconfig/network
 - /etc/sysconfig/network-scripts/ifcfg-ethX (où X=0,1 ...)
 - La Commande hostname
 - La Commande ifconfig
 - Activer/Désactiver une Interface Manuellement
 - /etc/networks
 - Résolution d'adresses IP
 - /etc/resolv.conf
 - /etc/nsswitch.conf
 - /etc/hosts
- Services réseaux
 - xinetd
 - TCP Wrapper
- Diagnostique du Réseau
 - La commande ping
 - La commande ping6

- La commande netstat -i
 - La commande traceroute
 - La commande traceroute6
 - La commande tracepath6
 - Routage Statique
 - RHEL 6
 - La Commande route
 - Activer/désactiver le routage sur le serveur
 - Connexions à Distance
 - telnet
 - ftp
 - ssh
 - scp
 - Packet Sniffers
 - TCPdump
 - Installation
 - Utilisation
 - Wireshark
 - Installation
 - Utilisation
 - Port Scanners
 - nmap
 - Installation
 - Utilisation
 - Fichiers de configuration
 - Scripts
 - netcat
 - Installation
 - Utilisation
 - Le Pare-feu Netfilter/iptables
 - Introduction
 - La Configuration par Scripts sous RHEL 6
 - LAB #1
 - LAB #2
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- Encryption
 - GnuPG
 - Presentation
 - Installation
 - Utilisation
 - Public Key Infrastructures - PKI
 - Certificats X509
 - SSH et SCP
 - SSH
 - Introduction
 - SSH-1
 - SSH-2
 - Authentification par mot de passe
 - Authentification par clefs asymétriques
 - Serveur SSH
 - Client SSH
 - Utilisation
 - SCP
 - Introduction
 - Utilisation
 - Tunnels SSH
 - Validation des acquis
 - **Commandes** : netstat, arp, nslookup, dig, ifconfig, ifup, ifdown, ifstatus, NetworkManager, hostname, uname, ping, ping6, Traceroute, Traceroute6, Tracepath6, tcpd, xinetd, route, ntpd, telnet, wget, ftp, tcpdump, wireshark, nmap, netcat, iptables, gpg, ssh, scp.
 - **Mail, SQL et Quotas** - 2 heures.
 - Bases des Mail Transfer Agent (MTA)
 - SendMail
 - Gérer des données avec SQL
 - Quotas
 - **Commandes** : sendmail, Commandes SQL usuelles, quotacheck, edquota, repquota, quota, warnquota.
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