

Course Name	LINUX SYSTEM ADMINISTRATION – LEVEL II (SC)								
Course Overview	<p><i>Linux System Administration – Level II</i> focuses on the key tasks needed to become a full time Linux administrator. This course shall extend participants’ knowledge and skills deeper into Linux administration with topics that include file systems and partitioning, logical volumes, SELinux, firewalling, and troubleshooting. Participants who attend both Linux System Administration I and II are satisfactorily prepared for the Red Hat Certified System Administrator exam (EX200).</p>								
Course Objective	<p>Upon completion this course, the participants should be able to:</p> <ul style="list-style-type: none"> • Understand and use essential tools for handling files, directories, command-line environments, and documentation • Operate running systems, including booting into different run levels, identifying processes, starting and stopping virtual machines, and controlling services • Configure local storage using partitions and logical volumes • Create and configure file systems and file system attributes, such as permissions, encryption, access control lists, and network file systems • Deploy, configure, and maintain systems, including software installation, update, and core services • Manage users and groups, including use of a centralized directory for authentication • Manage security, including basic firewall and SELinux configuration 								
Target Audience	<p>This training is specifically designed for participants who have completed <i>Linux Administration – Level I</i>. This course is also suitable for participants with adequate knowledge, technical skills and experience with Unix or Linux operating system.</p>								
Course Outline	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">DAY / DATE</th> <th style="width: 25%;">TIME</th> <th style="width: 50%;">TOPIC</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">Day 1</td> <td style="vertical-align: top;"> 9 am – 12.30 noon 10 am – 10.15 am - Tea break </td> <td style="vertical-align: top;"> Automate installation with Kickstart <ul style="list-style-type: none"> • Automate the installation of Red Hat Enterprise Linux systems with Kickstart. </td> </tr> </tbody> </table>			DAY / DATE	TIME	TOPIC	Day 1	9 am – 12.30 noon 10 am – 10.15 am - Tea break	Automate installation with Kickstart <ul style="list-style-type: none"> • Automate the installation of Red Hat Enterprise Linux systems with Kickstart.
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			<p><i>12.30 noon – 2.00 pm</i></p> <p>- <i>Lunch</i></p> <p>2.00 pm – 5.30 pm</p> <p><i>4.00 pm – 4.15 pm</i></p> <p>- <i>Tea Break</i></p>	<p>Use regular expressions with grep</p> <ul style="list-style-type: none"> • Write regular expressions that, when partnered with grep, will allow you to quickly isolate or locate content within text files. <p>Create and Edit text files with vim</p> <ul style="list-style-type: none"> • Introduce the vim text editor, with which you can open, edit, and save text files. <p>Schedule future Linux tasks</p> <ul style="list-style-type: none"> • Schedule tasks to automatically execute in the future. <p>Manage priority of Linux processes</p> <ul style="list-style-type: none"> • Influence the relative priorities at which Linux processes run.
	Day 2		<p>9 am – 12.30 noon</p> <p><i>10 am – 10.15 am</i></p> <p>- <i>Tea break</i></p>	<p>Control access to files with access control lists (ACL)</p> <ul style="list-style-type: none"> • Manage file security using POSIX access control lists.

		<p><i>12.30 noon – 2.00 pm</i></p> <ul style="list-style-type: none"> - <i>Lunch</i> <p>2.00 pm – 5.30 pm</p> <p><i>4.00 pm – 4.15 pm</i></p> <ul style="list-style-type: none"> - <i>Tea break</i> 	<p>Manage SELinux security</p> <ul style="list-style-type: none"> • Manage the Security Enhanced Linux (SELinux) behavior of a system to keep it secure in case of a network service compromise. <p>Connect to network-defined users and groups</p> <ul style="list-style-type: none"> • Configure systems to use central identity management services
	Day 3	<p>9 am – 12.30 noon</p> <p><i>10 am – 10.15 am</i></p> <ul style="list-style-type: none"> - <i>Tea break</i> <p><i>12.30 noon – 2.00 pm</i></p> <ul style="list-style-type: none"> - <i>Lunch</i> <p>2.00 pm – 5.30 pm</p> <p><i>4.00 pm – 4.15 pm</i></p> <ul style="list-style-type: none"> - <i>Tea Break</i> 	<p>Add disks, partitions, and file systems to a Linux system</p> <ul style="list-style-type: none"> • Manage simple partitions and file systems. <p>Manage logical volume management (LVM) storage</p> <ul style="list-style-type: none"> • Manage logical volumes from the command line. <p>Access networked attached storage with network file system (NFS)</p> <ul style="list-style-type: none"> • Access (secure) NFS shares.

			<p>Access networked storage with SMB</p> <ul style="list-style-type: none"> • Use autofs and the command line to mount and unmount SMB file systems.
	Day4	<p>9 am – 12.30 noon</p> <p><i>10 am – 10.15 am</i></p> <ul style="list-style-type: none"> - <i>Tea break</i> <p><i>12.30 noon – 2.00 pm</i></p> <ul style="list-style-type: none"> - <i>Lunch</i> <p>2.00 pm – 5.30 pm</p> <p><i>4.00 pm – 4.15 pm</i></p> <ul style="list-style-type: none"> - <i>Tea Break</i> 	<p>Control and troubleshoot the Linux boot process</p> <p>Limit network communication with firewall</p> <ul style="list-style-type: none"> • Configure a basic firewall <p>Comprehensive review</p> <ul style="list-style-type: none"> • Practice and demonstrate knowledge and skills learned in this course.
<p><i>*Note: Topics proposed are subjects to changes</i></p>			
Duration	4 Days		