



## Very Very Advance Linux (V2AL)

**Duration: 3 Months (4 days (3 Hrs Per day) / Week)**

**Fees: 35000 Rs. (4 Installment Facility)**

### **Course Description:**

This Course is designed for those Technocrats, Linux Administrators, Network Consultants, DBA's want to make the best of linux capabilities in Small, Medium, Large IT/ITeS organizations. This course is completely targeted for industrial Environment with In-Detailed Practical Approach to LINUX.

This course strongly recommends that you must have at least worked on linux For 3-4 months or Basics and fundamentals of linux network capabilities must be known to you.

Even we recommends that you must have a linux certification prior joining this Very Very Advance Linux Course(V2AL) like RHCE, LCP, CALC etc.

During this course you will be exposed to Such Linux Capabilities which are an essential For building great, secured Linux Corporate Server Environment.

Simply at the end of this course you will definitely become A Master In Advance Linux Server Deployment. So Lets Ready To Rock The Linux World.

**1. Refreshing Fundamentals Of**

**2. Advance Linux installation**

Linux	Methods
<ul style="list-style-type: none"><li>● Re-invoking Linux Fundamentals.</li><li>● Examine basics .</li><li>● Technical Discussion about Certification Done.</li><li>● Bridging gap in Linux Fundamentals.</li><li>● Preparing For V2AL Course</li><li>● Technical Approach To any Prerequisites For V2AL Course.</li></ul>	<ul style="list-style-type: none"><li>● Understanding Linux Installation Source.</li><li>● Understanding Linux Mirriors .</li><li>● Understanding Various Linux Source Formats</li><li>● ISO images , DVD images , Torrents images , http images , network boot images</li><li>● Rescue images , mounting ISO images ,</li><li>● Installation of Linux ISO images and burning ISO images and Torrents images.</li><li>● Mounting Loop Device ISO images and perform Network Installations</li><li>● FTP Installation Method</li><li>● Understanding Linux Dell Power Edge Server Installation Implementation</li><li>● Understanding IBM Server Installation Implementation</li><li>● Understanding IBM PPC Installation Implementation</li><li>● Understanding 64 bit CPU Installation Implementation</li><li>● Understanding SCSI , USB Installation Implementation</li><li>● Ideal Partitioning Schems.</li><li>● Understanding RAID and LVM Implementation</li><li>● Troubleshooting Installation Implementations.</li></ul>

<b>3. Advance Boot Loaders Techniques</b>	<b>4. Advance File Systems Concepts</b>
<ul style="list-style-type: none"><li>● Boot Loaders Configurations</li><li>● Boot Loaders Configuration Syntax</li><li>● Boot Loaders Multi OS booting Techniques</li><li>● Boot loaders advance Capabilities</li><li>● Boot loaders Securities</li><li>● Boot Loaders Restoration techniques</li><li>● Understanding Third party Boot loaders</li><li>● Implementation of Third party Boot Loaders</li><li>● Advance Boot Loaders troubleshooting &amp; Tips</li></ul>	<ul style="list-style-type: none"><li>● Understanding Linux Files System Supports</li><li>● Understanding Linux Files System Implementation</li><li>● IBM, SGI and Other Linux Files System Implementation</li><li>● Formatting , converting , maintaining File Systems</li><li>● Advance Files Systems Automation Commands &amp; Implementation</li><li>● Files System Backup and restore Implementation</li><li>● SCSI , RAID , LVM File Systems Implementation</li><li>● Finding RootKit hacks within File Systems</li><li>● File Systems Trojans</li><li>● Delete , Resize , Convert , undelete File Systems Operations</li><li>● Understanding Linux File Systems Third Party Tools &amp; Implementation</li><li>● Remote File Systems Imaging</li><li>● Ghost File Systems</li></ul>
<b>5. Advance Linux Administrators Commands</b>	
<ul style="list-style-type: none"><li>● General Commands</li><li>● System Manager Commands</li><li>● Linux Process management Commands</li><li>● Linux File System Attributes Commands</li><li>● Linux device mounting Commands</li><li>● Linux File Types and Linking</li></ul>	

<p>Commands</p> <ul style="list-style-type: none"><li>● Linux Important Commands Options and Invocations</li><li>● Linux Job Scheduling and Controlling Commands &amp; Invocations</li><li>● Linux User Policies , Group Policies , Management and Invocations</li><li>● Advance GUI Management Commands &amp; Invocations</li><li>● Advance GUI Driver Installation and Configurations</li><li>● Advance GUI Library Interfacing and &amp; Admin tasks.</li></ul>	
<p style="text-align: center;"><b>Advance Linux Driven Network Engineering</b></p>	
<p><b>PART-1</b></p>	<p><b>PART -2</b></p>
<ul style="list-style-type: none"><li>● Refreshing Linux Networking Fundamentals.</li><li>● Understanding Various Network Protocols</li><li>● Understanding Linux Networking Topologies.</li><li>● Connecting Linux Machine To the Intranet</li><li>● Linux Network Servers init.d</li><li>● Linux Network Servers xinetd.d</li><li>● Linux Networking Scripts WalkThrough</li><li>● Linux tcp/ip wrappers and Configuration</li><li>● hosts.deny and hosts.allow</li><li>● Linux Network cards Configuration techniques</li><li>● Linux Wireless network cards</li></ul>	<ul style="list-style-type: none"><li>● Remote Linux File Management</li><li>● Remote Linux Copy</li><li>● Remote Linux Secure Copy</li><li>● Remote Linux File Transfers (FTP , SFTP , LFTP ,RCP , SCP,RSYNC)</li><li>● Remote Linux Servers</li><li>● Understanding ssh configuration</li><li>● Understanding ssh files</li><li>● Understanding ssh server security</li><li>● Understanding ssh client security</li><li>● Understanding ssh client Options</li><li>● Understanding ssh Server Options</li><li>● Understanding ssh 3<sup>rd</sup> Party</li></ul>

### Configuration

- Linux Gateway Configurations
- Linux Internet gateway Configuration
- Linux Modem Configuration(minicom , rp-ppoe, set serial , etc..)
- Linux Internet Connection Techniques and Invocations
- Linux Router Configurations (Router Device)
- Linux Router Mode Configuration (Router Device)
- Linux Router Troubleshooting (Router Device)
- Linux Router Configuration (PC device)
- Linux Router Configuration Tools (PC device)
- Linux Router Management (PC device)
- Linux Router Project (PC device)
- Linux manual Bridging
- Linux manual Bridging Configuration
- Linux manual Bridging testing & Troubleshooting
- Linux Networking /proc/sys/net Concepts
- Linux networking /proc modifications
- Linux Router / Modem /proc modifications
- Linux Kernel “ sysctl “
- Advance Linux Networking Tips

### Tools

- Working With ssh 3<sup>rd</sup> Party Tools
- Linux Legacy Servers
- Linux Legacy Server Threats
- Why and Why not rwall , rsh , rwho , rusers , rpc.r<servers>
- Linux Secure Network Communication
- Apple talk , ktalk , wall , rwall ,
- Linux 3<sup>rd</sup> Party Communication Tools
- Linux Chat servers
- gaim , kopete , yahoo , msn , kirc , xchat , Configurations
- Linux VOIP Tools and Configuration
- Linux Video Chat Configuration and Tools

<b>PART -3</b>	<b>PART -4</b>
<ul style="list-style-type: none"><li>● Linux Desktop Sharing Protocols</li><li>● Linux Desktop Sharing Utils</li><li>● krdc , vnc , secure vnc , vnc tunneling , vnc server</li><li>● vnc client configuration , xhost</li><li>● Linux Desktop Sharing 3<sup>rd</sup> Party Tools</li><li>● Linux Desktop Sharing accross Windows Clients</li><li>● Linux Desktop Sharing accross Linux Clients</li><li>● Linux FreeNX Detailed Server Configuration</li><li>● Linux freeNX Client Configuration</li><li>● Secure Desktop Sharing</li></ul>	<ul style="list-style-type: none"><li>● Advance Linux Networking Commands / Monitoring</li><li>● tcpdump</li><li>● netstat</li><li>● traceroute</li><li>● visualroute</li><li>● iptraf</li><li>● snort</li><li>● route</li><li>● ethereal</li><li>● ntop</li><li>● munin</li><li>● zabbix</li><li>● hci-config tool kit For Bluetooth networking.</li><li>● Linux Bluetooth network Configuration</li><li>● Linux Bluetooth Client Configuration</li><li>● kernel Bluetooth Statck (L2CAP ) support.</li><li>● Linux Bluetooth Device Manager</li><li>● netplugged</li></ul>
<b>PART -5</b>	<b>PART - 6</b>
<ul style="list-style-type: none"><li>● Linux Backup Strategy</li><li>● Linux backup Modes</li><li>● Multi Volume</li><li>● Incremental backup</li><li>● Backup Listing</li><li>● Linux backup built in tools</li><li>● tar , cpio , amanda</li><li>● restore , tar restoration</li><li>● tape Drive Configurations</li></ul>	<ul style="list-style-type: none"><li>● Understanding Linux Firewall</li><li>● Understanding Kernel Firewall Modules</li><li>● Understanding Linux /proc firewall data structures</li><li>● Understanding Linux iptables and Invocations</li><li>● Linux Iptables Front ends</li><li>● Nat Firewall rules and</li></ul>

<ul style="list-style-type: none"><li>● Types of tape drive</li><li>● tape drive SCSI , IDE interfacing</li><li>● tar with tape drive</li><li>● Common tape drive operations</li><li>● remote network archiver</li><li>● 3<sup>rd</sup> Party backup Tools</li><li>● storix , BRU , LONE-TAR etc..</li><li>● Backup Automation via Cron jobs</li></ul>	<p>Implementations.</p> <ul style="list-style-type: none"><li>● Bridge Firewall</li><li>● 3<sup>rd</sup> Party Firewall Tools and Implementations.</li><li>● Setting Yahoo and MSN messenger OutBound Rules</li><li>● Setting https Filtering</li><li>● FTP and Other no-secured Protocols Attacks + AntiGuard</li></ul>
<b>PART - 7</b>	<b>PART - 8</b>
<ul style="list-style-type: none"><li>● Understanding Linux mail server</li><li>● Linux Supported MTA and MUA</li><li>● MTA Configurations and MUA configurations.</li><li>● Detailed Corporate Mail server Setup with Qmail.</li><li>● Configuring remote MUA like Outlook , thunderbird , Evolution ,Opera</li><li>● Outlook issues with Linux mail servers</li><li>● Linux Mail Server Security certifications generator</li><li>● IMAP -IMAPS</li><li>● POP – POP3 - POP3S – POP PASSWD</li><li>● Secured SMTP</li><li>● SMTP Certificate Registration In MUA</li><li>● Configuring Anti Spam , Anti virus and mail queue Patching</li><li>● Queue Monitoring</li><li>● maildirmake ++ commnad line MailBox Creation</li><li>● Tips For Secured mail Server.</li></ul>	<ul style="list-style-type: none"><li>● Setting up Linux CVS Server</li><li>● Understanding CVS basics</li><li>● Understanding CVS advance Operational Commands</li><li>● CVS and Backup Integration</li><li>● Linux CVS Clients</li><li>● Accessing / Managing remote CVS</li><li>● Windows CVS Clients if CVS Server is Linux</li><li>● CVS Gui and 3<sup>rd</sup> Party Tools</li><li>● CVS user and Group Policies</li></ul>

<b>PART - 9</b>	<b>PART - 10</b>
<ul style="list-style-type: none"><li>● Linux LAMP Technology (Linux – Apache – Mysql - php)</li><li>● Understanding need of LAMP</li><li>● Various ways to setup LAMP</li><li>● Essential Modules For LAMP</li><li>● LAMP testing and troubleshooting</li><li>● Understanding mail Apache Mods</li><li>● Apache Security</li><li>● Apache web server Configurations</li><li>● Apache web server imp Directives</li><li>● Testing Apache Standalone</li><li>● Monitoring Mysql Admin.</li><li>● Apache and SSL interfacing</li><li>● Tips and Apache Troubleshooting</li></ul>	<ul style="list-style-type: none"><li>● Linux Common Security loopholes</li><li>● Covering Common linux Securities Issues</li><li>● Checking Linux Securities</li><li>● various Securities Configurations</li><li>● Identifying the threats and anti-guard</li><li>● Analyzing the various Linux logs</li><li>● Log rotation</li><li>● Log watch</li><li>● Log conversion</li><li>● Centralized log Server Configuration</li><li>● Centralized log Server Management</li><li>● Centralized log servers troubleshooting</li><li>● various 3<sup>rd</sup> Party Loglizer</li><li>● Log graph generator</li><li>● Mrtg and zabbix</li></ul>

**Note:**

In this Course we do not include **Samba / NFS and Squid proxy** as there is not so much modifications require to this server to work for 100 clients or 1000 clients Organization.

If require we can include this severs as per demand by short review in existing contents.

**Ratio of Approach:**

**70 : 30**  
**Practical hands on : Theory Sessions**

**Course Accessories :** OS Cd's / test papers / hard book materials / Tools Cd