



# Linux Internals - Training (Beginner)

## 5-Day Session

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| <b>Title</b>                  | <b>Linux Internals - Training (Beginner)</b>   |
| <b>Overview</b>               | The C Programming in Linux Environment<br>Automake and Makefiles<br>Scripting - Bash<br>Linux Kernel Design and Architecture<br>Processes and Threads<br>Process Scheduling<br>Interrupt and Signal Handling<br>Memory Management<br>Device Drivers - Intro<br>Filesystems – Block and Flash<br>Network Programming<br>Practical labs on Linux VirtualBox or Ubuntu Systems                              |
| <b>Duration</b>               | 5 Full-Day Session – 40 hours/8 hours a day<br>50% Theory, 50% Practical   |
| <b>Language</b>               | C, Scripting Languages   |
| <b>Audience</b>               | People desiring to change their domains into the systems/embedded domain. This program can be followed by the Embedded Linux Systems Training (Intermediate).  |
| <b>Pre-requisites</b>         | <ul style="list-style-type: none"><li>• Basic knowledge of C programming and Operating Systems</li><li>• Bring your own Laptops so as to be able to have the development environment always</li></ul>  |
| <b>Pre-Work</b>               | <ul style="list-style-type: none"><li>• Install any flavour of Linux on your laptops. All of Ubuntu, Fedora, Suse, etc works</li><li>• For those who do not want Linux natively on their laptops can install VirtualBox with Ubuntu guests</li><li>• Tutorials for Linux Installation, VirtualBox, and Programming in the Linux environment will be uploaded on the site in due course of time</li></ul> |
| <b>Materials Provided</b>     | Printed and Soft copy of the presentation material and labs exercises with solutions   |
| <b>Hardware Lab Equipment</b> | All exercises for this beginner course can be successfully executed in your Ubuntu environment   |

