

Report on Two day workshop on GNU/Linux System Masters' Training Programme

(at ICFOSS office on 20th and 21st April, 2016)

Introduction

ICFOSS has organised a Masters' Training Programme in GNU/Linux for forming a group of experts as Master Trainers to handle the training on FOSS. The training was on 20th and 21st of April 2016 at ICFOSS office from 10.00 am – 4.00 pm. The programme was free of cost. There were 15 persons from different organisations participated in the programme.

Resource Person

The resource person for the programme was Mr. Arun. M, Director of Society for the Promotion of Alternative Computing and Education (SPACE). He is an exponent in the field of Free and Open Source Software having immense experience in this domain. He is also a researcher in science and technology policy and founding member of Free Software Foundation of India. He played an important role in the formation of Kerala IT Policy in 2007. He involved in Kerala government's migration of schools to free software. Currently he is a research fellow affiliated with Center for Development Studies/Jawaharlal Nehru University.

Day One

The programme commenced at 10.00 am with the registration of participants. The subject matter dealt with in the programme was the salient features of GNU/LINUX, the Free and Open Source Software. There was an introductory speech about GNU/LINUX operating system:

Linux is an operating system with a series of programs that let one to interact with his computer and run other programs. An operating system consists of various fundamental programs which are needed by the computer so that it can communicate and receive instructions from users; read and write data to hard disks, tapes, and printers; control the use of memory; and run other software. The most important part of an operating system is the kernel. In a GNU/Linux system, Linux is the kernel component. The rest of the system consists of other programs, many of which were written by or for the GNU Project. Because the Linux kernel alone does not form a working operating system, we prefer to use the term “GNU/Linux”. Linux is modelled on the Unix operating system. From the start, Linux was designed to be a multi-tasking, multi-user system. In contrast to other operating systems, nobody owns Linux. Much of its development is done by unpaid volunteers.

The file structure of Linux system and their requirements were explained to the participants. It helps to understand the working and the difference between users and root. The booting process and the files involved in this process were explained. The kernel was also made known to the participants. The hands on session began in the afternoon. The participants were instructed to install the Debian Operating System in this session. With the help of the resource person all the participants were able to install the above operating system in their computers. This was done by dividing the participants in to three groups.

Day Two

The programme commenced at 10.30 am. All the subject dealt with in the previous day were recollected. Then the class started with the installation of Debian Operating System PXE boot. A PXE install server allows the client computers to boot and install a Linux distribution over the network, without the need of burning Linux iso images onto a CD/DVD, boot floppy images, etc. This is handy if the client computers do not have CD or floppy drives. For the booting one system is configured as server with Debian Operating System and another as Client. In the client system the image is copied to the server directory. On configuration, upto four systems can be booted from the server Operating System with out any failure.

There was a session on vi editor in the afternoon. Mr. Amitdev Senior Principal Applications Engineer, Oracle, handled the session. The vi editor (short for visual editor) is a screen editor which is available on almost all Unix systems. The vi has no menus but instead uses combinations of keystrokes in order to accomplish commands. It helps to develop our skills in using command line to edit program. There are some additional features in it to help the beginners.

Conclusion

The workshop was very informative and interesting for the participants. They have shown much interest in the hands own sessions as well as in lecture classes. The participants in the programme were provided with food . The resource person has been provided with local travel and remuneration.

The programme concluded at 6.00 pm.