# Workshop on LAMP Servers

From  $14^{th}$  Jan 2013 to  $25^{th}$  Jan 2013

--A practical introduction to design dynamic websites based on Linux, Apache2, MySQL and PHP5. This workshop will be conducted by Dr. Andreas Matzke, an IT expert from Germany. The use of Linux operating system, Apache2 html web server, MySQL database and PHP5 programming language is a worldwide popular standard to create and host dynamic websites. All components are free of cost open source software having proved in many cases its stability and performance. During the workshop, a LAMP (Linux-Apache- MySQL-PHP) server stack will be realized within a virtual machine as a step by step process. Basic topology of real computers and virtual machines will be discussed as well as UNIX based operating systems for workstations and servers. As far as it will be necessary for the following aspects of the workshop, some basics of network design will be mentioned. Together with the installation of the MySQL database software, a simple database will be designed as a basis for some exercises in SQL programming. The installation of an Apache2 web server with the design of some simple websites and finally the installation of a PHP5 interpreter with some exercises in PHP programming will complete the first approach to the LAMP server bundle. To experience the performance of LAMP servers, some interactive websites using PHP5 will be

designed. The workshop will end with the design of a small content management system. The participants of the workshop should be students of informatics in the first semesters of their studies. There is no special knowledge expected, all topics will be presented from the basis. The practical programming work will have a central place within the workshop. The workshop should last two weeks with a daily time contingent of about four hours. During the workshop each participant must have access to his own computer. The computers should be connected to the internet to allow download and installation of special Linux components. All software components needed are free of costs and will be provided.

#### Dr. Andreas Matzke

Dr. Andreas Matzke was born in 1954 in Berlin,
Germany. After finishing his studies of electrical
engineering at the Technische Universität Berlin in 1980,
he got his doctor's degree for his research in the field of
digital signal processing and adaptive control systems in
1985 at the Technische Hochschule Aachen. After some
years as head of the electronic departments at a
machinery manufacturer, in 1989 he changed to a public
broadcaster, where, as head of the technical
departments, he was responsible for the introduction of
digital systems. Since 2000 he is working for SES and
UNESCO as an expert for computer based multimedia
archive systems. He installed media archives in Yemen,
Albania and Ethiopia.

#### Registration fee: Rs. 3000/-only

For Registration Contact: Ms.

Mehtab Bano, Ms. Sheeba Naz Tel:

021-111-222-292 ext 264,274

Email: m.bano@iccs.edu, sheeba.naz@iccs.edu

### Structure of the LAMP Server Workshop

Structure of the LAWIP Server Workship	
Lecture	Exerci se
Basic topology of real computers and virtual machines	Installation of a virtual machine
UNIX based operating systems for workstations and servers	Installation of a linux server and client within our virtual machine, some experiments with basic software components of linux
Basics of network design	Some experiments in regard of basic aspects like DNS or DHCP, IPv4 and IPv6, experiments with the virtual network within our linux installation
Basics of SQL-databases, basics of SQL	Installation of the MySQL database software, we design a simple database, some exercises in SQL programming
Web servers, basics of website design and Html	Installation of an Apache web server, we design a simple website, experiments in regard of security aspects
Programming of interactive websites, basics of php programming language	Installation of a php5 interpreter, some exercises in php programming
Accessing databases by	Design of an interactive website
interactive websites	using php5
Content management systems using LAMP (Linux Apache MySQL Php) environments, basic demands on content management systems	Design of a content management system, we design the database needed within the system, we design some different websites needed within the system, some experiments regarding security aspects
Handling of multimedia content within our	Some experiments to handle large files

LEJ National Science Information Center International Center for Chemical and Biological Sciences University of Karachi

Website: http://iccs.edu Facebook: http://www.facebook.com/MarketingUnitIccb

# Workshop on LAMP servers

January 14-25, 2013

Latif Ebrahim Jamal National Science Information Center International Center for Chemical and Biological Sciences, University of Karachi, Karachi

Kindly send the dully filled registration form along with registration fee (Rs. 3000 only) through pay order in favor of "Director, ICCBS, University of Karachi" to following address on or before January 11, 2013.

#### Address for correspondence:

Ms. Mehtab Bano, Ms. Sheeba Naz LEJ National Science Information Center International Center for Chemical and Biological Sciences, University of Karachi, Karachi-75270.

Tel. 021-111-222-292 Ext. 274

Email: m.bano@iccs.edu; sheeba.naz@iccs.edu

## **Registration form**

name.
Qualification:
Current Position (if any):
Affiliation:
Address:
Tel./Fax:
Email:
Please provide a brief description mentioning why you are interested in this workshop