Implementing **Samba** (2 days)

How to integrate your Unix/Linux systems with your Microsoft network using Samba

Relevant Platforms:
- **Linux**
- **Unix**
- **Windows 95/98**
- **Windows NT**
- **Windows 2000**
- **Windows XP**
- **Windows .NET**

You will learn how to
- Install and build Samba
- Configure Samba on Linux
- Create and manage Samba shares.
- Create and manage Samba printer services
- Understand the Samba security and authentication options
- Implement Domain security using Samba
- Manage users and groups on a Samba server
- Understand how to create, update and synchronise user and machine passwords
- Implement WINS using Samba
- Use advanced Samba techniques

Course Benefits
Microsoft networking (also known as CIFS and SMB) is widely used in corporate networks for sharing files, printers and for the authentication of users. Often it is desirable to use Linux or Unix servers in a Microsoft environment. Samba makes this possible.

Whilst setting up a network using Windows can seem deceptively easy, in actual fact SMB/CIFS networking is very complex. NT Domains and Active Directory add to the complexity. Understanding these protocols and systems is essential when seeking to use them effectively and particularly when you wish to mix Microsoft networking across multiple operating systems.

This course explains in detail the principles of networking using CIFS and SMB. It also shows in detail how you can use Samba to implement Microsoft networking on Linux and Unix in your environment.

Who Should Attend
This course is ideal for network administrators who are responsible for integrating Microsoft networking with Unix and Linux platforms.

A good knowledge of general networking concepts and TCP/IP in particular, is assumed.

Course Contents

Networking Recap
- TCP/IP
- The Internet
- File sharing
- Print sharing
- Name services
- Authentication

MS Networking and NetBIOS
- History of NetBIOS
- LANManger & NetBIOS
- Netbeui
- NetBIOS over TCP/IP
- Evolution of MS Networking
- SMB & CIFS

Samba
- What is Samba?
- File sharing & Printer services
- WINS Server
- Authentication models
- Integration with Unix/Linux
- Active directory and Samba

Installing Samba
- Obtaining Samba
- Building and Compiling Samba
- Installing Samba
- Testing

Configuring Samba
- The configuration file
- A basic smb.conf
- The Samba daemons
- Starting Samba
- Stopping Samba
- Samba files
- Debugging Samba

Configuring Samba Clients
- Basic Principles
- Windows 95 & Windows 98
- Windows NT
- Windows 2000
- Windows XP
- Unix/Linux Clients

File Sharing and Samba
- SMB/CIFS file sharing
- smb.conf and file sharing
- Server configuration
- Creating shares
- File share options
- Virtual servers
- Logging

Browsing
- Samba as a browse master
- local, backup and domain browse masters
- Browsing across an Internetwork

Samba Printer Service
- Configuring printers
- Managing printer drivers

Samba Security Models
- Users and groups
- Share and user access
- Domain security
- Encryption issues
- Password management
- User management
- Permissions
- Active directory

Name Services and WINS
- Name resolution in Samba
- hosts and lmhosts
- WINS
- Integration with DNS & LDAP

Samba and Active Directory
- Active Directory principles
- Samba as an AD client & server

Configuration with SWAT
- Installing and managing SWAT
- Using SWAT

Practicals
During the course there will be many opportunities for hands-on work. Each module has detailed exercises or demonstrations associated with it. Every delegate has at least one server provided for their own use.

Delegates will have a Linux server running Samba each. Windows servers will be available within the classroom.

Hands-On includes:
- Installing and building Samba
- Set-up a Samba client
- Configuring Samba shares
- Network monitoring of Samba and understanding SMB/CIFS datagrams
- Configuring a Samba Print server
- Manage browsing in Samba
- Create and manage an NT Domain using Samba
- Set-up a Samba WINS server

The Trainers
All our trainers are practising network consultants with extensive experience with Samba networking on UNIX & Linux in large commercial environments. They are ideally suited to bring you the highest quality of training.

The Company
For further information about the training and our company see our web-site at www.erion.co.uk

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