SEC TRAINING & EXPO SDN BHD

ASTERISK TRAINING OUTLINE

Duration	:	5 days
Audience	:	Installers, configurators, administrators, programmers, consultants and those who wish to acquaint themselves with the installation, configuration, administration and internals of Asterisk
Pre-requisites:		Preferably technical IT background with knowledge of Linux Operating System
Objective	:	The participant will get an in depth knowledge of Asterisk, and be able to design, install, configure and integrate Asterisk with third party open source applications.

DAY 1
An Introduction to Asterisk

DAY 2&3
Asterisk Basic : Installation & Configuration
1. Introduction
2. Asterisk Architecture
3. Connectivity
4. Designing Your System
5. Install Linux and Asterisk
6. Asterisk Configuration
7. SIP Configuration
8. Zaptel Configuration
9. IAX Configuration
10. Application Configuration
11. Run and Manage Asterisk
12. Your First Configuration
13. Cisco 7960
14. Snom Telephones
15. T-Carrier and SONET
16. Network and Signaling

Workshop : 2 Quarter-Day Sessions
§ Practical workshop based on GUI and Basic Dialplan

DAY 4-5
Asterisk Advance : Installation & Configuration. Practical & Support, Tuning & Troubleshooting
1. *Introduction to Asterisk*
§ General Concept of Asterisk
§ Asterisk Architecture
§ Key Components
§ Add-On/Optional Components.

2. *Installing Asterisk*
§ Requirements
§ Hardware Installation.
§ Downloading Asterisk from CVS
§ Compiling Asterisk
§ Loading Drivers
§ Starting Asterisk
§ Starting Automatically at Boot Time

3. *Asterisk Channels*
§ What are Asterisk Channels?
§ Channel Configuration Files

4. *Creating Dialplans*
§ Introduction to Creating Dialplans
§ A Simple Example
§ Adding Additional Functionality
§ Variables
§ Macros
§ Call Flow

5. *AdvancedDial Plan Concepts*
§ VoiceMail
§ Music on Hold
§ Conferences
§ Call Parking

6. *Modules, or "Things that make Asterisk work.".*
§ Core Asterisk configuration
§ Modules

7. *The Asterisk Cookbook*

8. *Scripting with the AsteriskGateway Interface (AGI)*

9. *Advanced Asterisk Configuration*
§ Agents and the Asterisk ACD
§ Text-To-Speech: Festival
§ CLASS Features (John Todd?)
§ Fax (Software Fax) (SteveUnderwood?)
§ Sphinx Speech Recognition (ASR)
§ Distributed Asterisk (Clustering/TDMoE)
§ ENUM/E164Call Routing (LCR)
§ Databases and Asterisk
§ Auto-Dialout (Call Files)

10. *Common Issues*
§ Music on Hold/MP3 Playback
§ DTMF over SIP
§ Internationalization of Asterisk
§ SIP and NAT
§ Optional/Added Codecs
§ Message Waiting Indication
§ Common Hardware Device Issues
§ Echo Cancellation Issues
§ Interfacing with Legacy PBXEquipment
§ Howto politely use the Asterisk-Users List
§ Howto politely use the Asterisk IRC channel

11. *Creating Asterisk Applications in C*
    A. Sources of Additional Information
    B. Connecting Asterisk to Common VoIPProviders
    C. Applications Reference
    D. CLI Command Reference
    E. Manager Commands Reference
    F. The Asterisk C API Reference
    G. Other Open Source TelephonySystems
    H. Other Hardware
    I. Building Additional Modules

Workshop : *2 Quarter-Day Sessions*
§ Practical workshop based on Basic and Advances Dialplan