

Flávio E. Gonçalves

UPDATED for version 1.6!  
INCLUDES a chapter on How to  
using Asterisk 2.5!

4<sup>TH</sup> GENERATION

# Configuration Guide for **asterisk** **pbx**

How to build and configure a PBX with open source Software

# Configuration Guide For Asterisk Pbx

**Jim Van Meggelen, Leif Madsen, Jared  
Smith**



## **Configuration Guide For Asterisk Pbx:**

**Configuration Guide for Asterisk PBX** Flavio E. Goncalves, 2007      **Complete Asterisk Training: Learn How to Install and Configure an Asterisk Pbx** Flavio E. Goncalves, 2019-02-07

Complete Asterisk Training is a new edition of the Configuration Guide for Asterisk PBX. The reason for changing the name is to match the name of the online training available on Udemy. So this book is part of a three-part training system: eLearning Text Book and Lab Guide. Why a different book about Asterisk? Most books are not oriented to teach the reader on how to build a complete PBX. They present many concepts but not with a story. An objective I have based this book in the old training guides from Novell. So it has a start where you install Asterisk, then you create extensions, trunks, dialplan until you complete a fully functional free and open source PBX. Then we go to more advanced concepts. In this book you will learn: How to install Asterisk, How to register extensions, How to connect SIP trunks, How to create a dial plan to send and receive calls, How to configure analog and digital channels, How to configure SIP IAX and PJSIP, How to use Asterisk behind NAT and clients behind NAT, How to use PBX features such as transfer, capture, parking, conference, How to configure Call queues and Agents, How to generate CDRs to a database using ODBC drivers, How to develop simple AGIs and AMIs to connect your programs, How to secure Asterisk using Fail2Ban, IPTABLES, TLS and SRTP, How to use Asterisk Real Time to read the configuration from a database. We cover the latest version Asterisk 16, a Long Term Support version. I hope you use this version for a long time. This book has more than 10 years; the first edition was in 2006 and since then it has been updated once each 4 or 5 years. This book has two companions: A training on Udemy with the same name and a Lab Guide on github. More details inside the book. I sincerely hope you enjoy. Flavio E. Goncalves      **Asterisk** Leif Madsen, Jim Van Meggelen, Russell Bryant, 2011-04-15. Provides information on designing a VoIP or analog PBX using Asterisk, covering how to install, configure and integrate the software into an existing phone system      **Building Telephony Systems with OpenSIPS** Flavio E. Goncalves, Bogdan-Andrei Iancu, 2016-01-30. Build high speed and highly scalable telephony systems using OpenSIPS. About This Book: Install and configure OpenSIPS to authenticate, route, bill and monitor VoIP calls. Gain a competitive edge using the most scalable VoIP technology. Discover the latest features of OpenSIPS with practical examples and case studies. Who This Book Is For: If you want to understand how to build a SIP provider from scratch using OpenSIPS, then this book is ideal for you. It is beneficial for VoIP providers, large enterprises and universities. This book will also help readers who were using OpenSER but are now confused with the new OpenSIPS. Telephony and Linux experience will be helpful to get the most out of this book but is not essential. Prior knowledge of OpenSIPS is not assumed. What You Will Learn: Learn to prepare and configure a Linux system for OpenSIPS. Familiarise yourself with the installation and configuration of OpenSIPS. Understand how to set a domain and create users, extensions. Configure SIP endpoints and make calls between them. Make calls to and from the PSTN and create access control lists to authorize calls. Install a graphical user interface to simplify the task of provisioning user and system information. Implement an effective billing

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**Asterisk: The Definitive Guide** Russell Bryant, Leif Madsen, Jim Van Meggelen, 2013-05-10 Design a complete Voice over IP VoIP or traditional PBX system with Asterisk even if you have only basic telecommunications knowledge This bestselling guide makes it easy with a detailed roadmap that shows you how to install and configure this open source software whether you re upgrading your existing phone system or starting from scratch Ideal for Linux administrators developers and power users this updated edition shows you how to write a basic dialplan step by step and brings you up to speed on the features in Asterisk 11 the latest long term support release from Digium You ll quickly gain working knowledge to build a simple yet inclusive system Integrate Asterisk with analog VoIP and digital telephony systems Build an interactive dialplan using best practices for more advanced features Delve into voicemail options such as storing messages in a database Connect to external services including Google Talk XMPP and calendars Incorporate Asterisk features and functions into a relational database to facilitate information sharing Learn how to use Asterisk s security call routing and faxing features Monitor and control your system with the Asterisk Manager Interface AMI Plan for expansion by learning tools for building distributed systems

**Asterisk: The Definitive Guide** Leif Madsen, Jim Van Meggelen, Russell Bryant, 2011-04-08 Design a complete VoIP or analog PBX with Asterisk even if you have no previous Asterisk experience and only basic telecommunications knowledge This bestselling guide makes it easy with a detailed

roadmap to installing configuring and integrating this open source software into your existing phone system Ideal for Linux administrators developers and power users this book shows you how to write a basic dialplan step by step and quickly brings you up to speed on the latest Asterisk features in version 1.8 Integrate Asterisk with analog VoIP and digital telephony systems Build a simple interactive dialplan and dive into advanced concepts Use Asterisk's voicemail options including a standalone voicemail server Build a menuing system and add applications that act on caller input Incorporate a relational database with MySQL and PostgreSQL Connect to external services such as LDAP calendars XMPP and Skype Use Automatic Call Distribution to build a call queuing system Learn how to use Asterisk's security call routing and faxing features

Asterisk Leif Madsen, 2011 Provides information on designing a VoIP or analog PBX using Asterisk covering how to install configure and integrate the software into an existing phone system

**Linux Administration: A Beginner's Guide, Eighth Edition** Wale Soyinka, 2020-04-10 Publisher's Note Products purchased from Third Party sellers are not guaranteed by the publisher for quality authenticity or access to any online entitlements included with the product Gain Essential Linux Administration Skills Easily Effectively set up and manage popular Linux distributions on individual servers and build entire network infrastructures using this practical resource Fully updated to cover the latest tools and techniques Linux Administration A Beginner's Guide Eighth Edition features clear explanations step by step instructions and real world examples Find out how to configure hardware and software work from the command line or GUI maintain Internet and network services and secure your data Performance tuning virtualization containers software management security and backup solutions are covered in detail Install and configure Linux including the latest distributions from Fedora Ubuntu CentOS openSUSE Debian and RHEL Set up and administer core system services daemons users and groups Manage software applications from source code or binary packages Customize build or patch the Linux kernel Understand and manage the Linux network stack and networking protocols including TCP/IP ARP IPv4 and IPv6 Minimize security threats and build reliable firewalls and routers with Netfilter iptables and nftables and Linux Create and maintain DNS FTP web e-mail print LDAP VoIP and SSH servers and services Share resources using GlusterFS NFS and Samba Spin up and manage Linux based servers in popular cloud environments such as OpenStack AWS Azure Linode and GCE Explore virtualization and container technologies using KVM Docker Kubernetes and Open Container Initiative OCI tooling Download specially curated Virtual Machine image and containers that replicate various exercises software servers commands and concepts covered in the book Wale Soyinka is a father system administrator a DevOps SecOps aficionado an open source evangelist a hacker and a well respected world renowned chef in his mind He is the author of Advanced Linux Administration as well as other Linux Network and Windows administration training materials

**Asterisk: The Definitive Guide** Jim Van Meggelen, Russell Bryant, Leif Madsen, 2019-06-24 Design a complete Voice over IP VoIP or traditional PBX system with Asterisk even if you have only basic telecommunications knowledge This bestselling guide makes it easy with a detailed roadmap that shows you

how to install and configure this open source software whether you're upgrading your existing phone system or starting from scratch Ideal for Linux administrators developers and power users this updated fifth edition shows you how to set up VoIP based private telephone switching systems within the enterprise You'll get up to speed on the features in Asterisk 16 the latest long term support release from Digium This book also includes new chapters on WebRTC and the Asterisk Real time Interface ARI Discover how WebRTC provides a new direction for Asterisk Gain the knowledge to build a simple but complete phone system Build an interactive dialplan using best practices for Asterisk's advanced features Learn how ARI has emerged as the API of choice for interfacing web development languages with Asterisk

*Global Telehealth 2012* Anthony C. Smith, Nigel R. Armfield, Robert H. Eikelboom, 2012 Health systems worldwide are under increasing pressure to deliver services in an efficient and cost effective manner Telehealth or the delivery of health services at a distance has an important role to play in achieving this Communication technologies are becoming more readily accessible and affordable and an array of telehealth applications are emerging which have potential benefits for patients and clinicians particularly in areas where health services are traditionally limited non-existent or difficult to access This book presents papers selected from contributions to the 2nd International Conference on Global

*Intelligent Embedded Systems* Daniel Thalmann, N. Subhashini, K. Mohanaprasad, M. S. Bala Murugan, 2018-02-16 This book is a collection of papers from international experts presented at the International Conference on NextGen Electronic Technologies ICNETS2 ICNETS2 encompassed six symposia covering all aspects of electronics and communications engineering including relevant nano micro materials and devices Highlighting recent research in intelligent embedded systems the book is a valuable resource for professionals and students working in the core areas of electronics and their applications especially in signal processing embedded systems and networking The contents of this volume will be of interest to researchers and professionals alike

[Asterisk](#) Jim Van Meggelen, Jared Smith, Leif Madsen, 2005 Many organizations are drawn to Internet telephony's promise of cost savings and its ability to move data images and voice traffic over the same connection Asterisk an open source system that runs on Linux offers the best option This guide covers installing configuring and integrating Asterisk with existing phone systems without the need for additional hardware

**FCC Record** United States. Federal Communications Commission, 2015

**Asterisk: The Definitive Guide** Russell Bryant, Leif Madsen, Jim Van Meggelen, 2013-05-10 Design a complete Voice over IP VoIP or traditional PBX system with Asterisk even if you have only basic telecommunications knowledge This bestselling guide makes it easy with a detailed roadmap that shows you how to install and configure this open source software whether you're upgrading your existing phone system or starting from scratch Ideal for Linux administrators developers and power users this updated edition shows you how to write a basic dialplan step by step and brings you up to speed on the features in Asterisk 11 the latest long term support release from Digium You'll quickly gain working knowledge to build a simple yet inclusive system Integrate Asterisk with analog VoIP and digital telephony systems Build an interactive dialplan using best

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solution of choice to many organizations and consultants With a foreword from Mark Spencer the man behind Asterisk this book presents the accumulated wisdom of three leading Asterisk Consultants and shows the reader how to get the most out of Asterisk in the commercial environment Over the course of eleven chapters this book introduces the reader to topics as diverse as Advanced Dial Plans Network Considerations and Call Routing through to Localization DAHDI Speech Technology and Working with a GUI The book also covers the more nebulous aspects of being an Asterisk professional such as evaluating customer requirements and pitching for contracts This book represents the wisdom and thoughts of front line consultants The knowledge they impart will prove informative thought provoking and be of lasting interest to Asterisk professionals

**TrixBox Made Easy** Barrie Dempster,Kerry Garrison,2006 The book is incremental and structured in its approach It starts by clearly describing the basics of PBX systems and of Asterisk itself on which Trixbox is based Then the book explains how TrixBox links to and controls Asterisk Once the core concepts are understood the book carefully takes you through each stage of setting up and managing your VoIP system with an abundance of screenshots for easy implementation Because the book covers the concepts and practices of both telephony and Asterisk it is suitable for both professional and home users with no prior telecom experience It s ideal for any user wishing to set up a telephony system for individual or small business usage No previous knowledge of Trixbox or networking is required although some basic knowledge of PBX and Linux would be an advantage

**Flight Crew Training** ,1989



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