

A Short Asterisk Overview

M\$ Alternatives Tech Talk
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prepared by

Emil Stoyanov
emosto@web.de
stoyanov@kiax.org

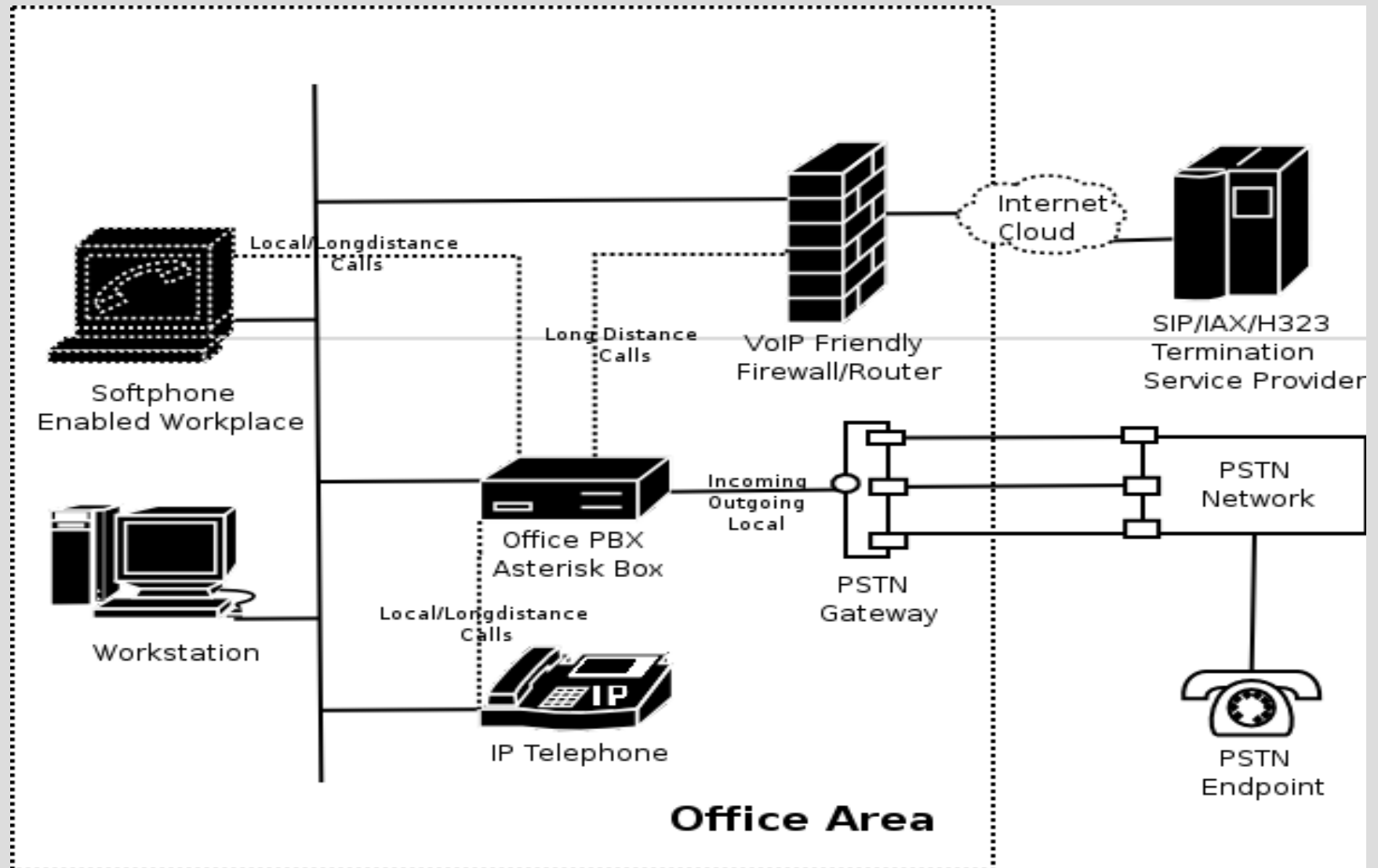
What is Asterisk?

- Private Branch eXchange (PBX)
 - Telephone Exchange for private offices
 - Focus on Voice Over IP (VoIP) Support
- An Interactive Voice Response Platform
 - Extensible with modules
 - Shipped with a set of applications enough to build modest but efficient middle-sized office systems
- Open Source Solution
 - GPL Licensed
 - Commercial License (embedded proprietary code)
 - Commercially supported by Digium Inc.

Usage Scenarios - 1

- Home VoIP PBX
 - Saves costs on long distance calls
 - Flexible answering machine
- Office VoIP PBX
 - Free voice communication between offices
 - Flexible on-line customer support (+ call queues)
 - Video & audio conferences with customers/partners
- VoIP Termination Services
 - Inet providers have advantage
 - Offer VoIP service/traffic to business customers
- VoIP Gateway
 - Asterisk is portable and scalable
 - Usable with appliances and gateways

Usage Scenarios - 2



Asterisk appliance in small offices

Characteristics

- **Portable**
 - Crossplatform programmed (pure C)
 - Initially written for Linux
 - Ported on other Unix-like OS
 - Version 1.4 compiles on FreeBSD without patches
- **Performance**
 - Written not with performance in mind as a priority
 - Behind some SIP-only solutions (SER, OpenSER) or dedicated commercial systems
- **Considering Asterisk**
 - Integrates different channels and hardware
 - Growing variety of supported hardware

Capabilities

- Protocols
 - H.323, SIP, MGCP, IAX2, XMPP, ISDN, etc..
- Codecs
 - Transcodable and passthrough-only
 - Audio G.711, GSM, iLBC, Speex, G.723, G.729, etc
 - Video H.263, H.263+, H.264 (MPEG4)
- Dialplans
 - Pattern-based matching/routing
 - Macros
 - Asterisk Extension Language (AEL)
 - EMUM (number mapping), DUNDI (dialplan sharing)
- Call Detail Record (CDR)
 - Support for CSV
 - ODBC, postgresql, mysql, FreeTDS

BSD? Linux?

- Linux
 - Only kernel, gazillion of distributions with poor documentation
 - Evolving rapidly, unstable APIs
 - Portable, up- and down-scalable architecture – suitable for embedded world and servers
 - GPL – you need lawyer to understand it
- BSD
 - Complete OS, tested as a whole, 3 major flavours, depending on what you want, desktop not a problem
 - Stable APIs, evolving with caution, EXCELLENT DOCS (engineers like us appreciate it)
 - BSD-License – you understand it, not frightening
 - Portable – NetBSD is supported on over 50 platforms

Open Source Matters

THANK YOU!

I'm available off-line for questions