

# SIP Trunking Workshop

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- What is SIP Trunking
- What is Open Source Asterisk
- Why are they important together
- One perspective on future of SIP Trunking
- How to take the next step

# What is SIP Trunking?

- The new dialtone
- SIP is technical name for a phone line
  - **S**ession **I**nitiation **P**rotocol
  - Standards-based: RFCs
  - “IP” version of TDM Trunks
- Allows basic interoperability between heterogeneous equipment and services
  - SIPConnect is the SIP Forum’s interop test suite/specs
  - Customers still require “piece of mind”
- Some companies just have introduced SIP, others have had for years
- Today, “SIP Trunking” Certification is critical success factor to market acceptance

# What are the Major Benefits of SIP?

- Reduces costs
- Facilitates IP convergence simplifying networks and providing end-to-end unified communications
- Facilitates IP applications which are more powerful, more economical, and more flexible than TDM
- Eliminates gateways reducing complexity
- Enables wide variety of services from your SIP Service Provider

# What does a user look for from their PBX for SIP?

- SIP Standards
- SIP Forum Member
- SIP Connect Certified
- SIPit members/participants
- Certified with several SIP Service providers

# What are the biggest SIP Trunking Challenges?

- Different implementation of SIP RFC standards
- Use of reserved fields in SIP standards for proprietary extensions
- Constant changes by SIP Providers in access protocol
- Availability for multi-city/multi-country connections
- Understanding of SIP
- Trusting reliability after years of proven TDM

## *The Asterisk Community*

*The Asterisk Community was voted*

*#1 Most Influential Individual in VoIP, VoIP Info 11/2006*

- Over 1,540,000 downloads in 2008
- Over 1.03M downloads 1<sup>st</sup> half 2009
- Over 63,000 active participants on forums
- Over 28,500 Topics
- Over 92,000 Posts
- Over 17,700 on active Asterisk mailing lists
- Over 7,248 on our Bug Tracker
- Over 820 active contributors
- Over 2,000 new code commits in 2009
- Over 200 service providers worldwide using Asterisk
- Dedicated Industry Events:
  - AstriCon for Asterisk Developers and Users
  - Digium Asterisk World for Business Users

## Buy a complete OSS-based product

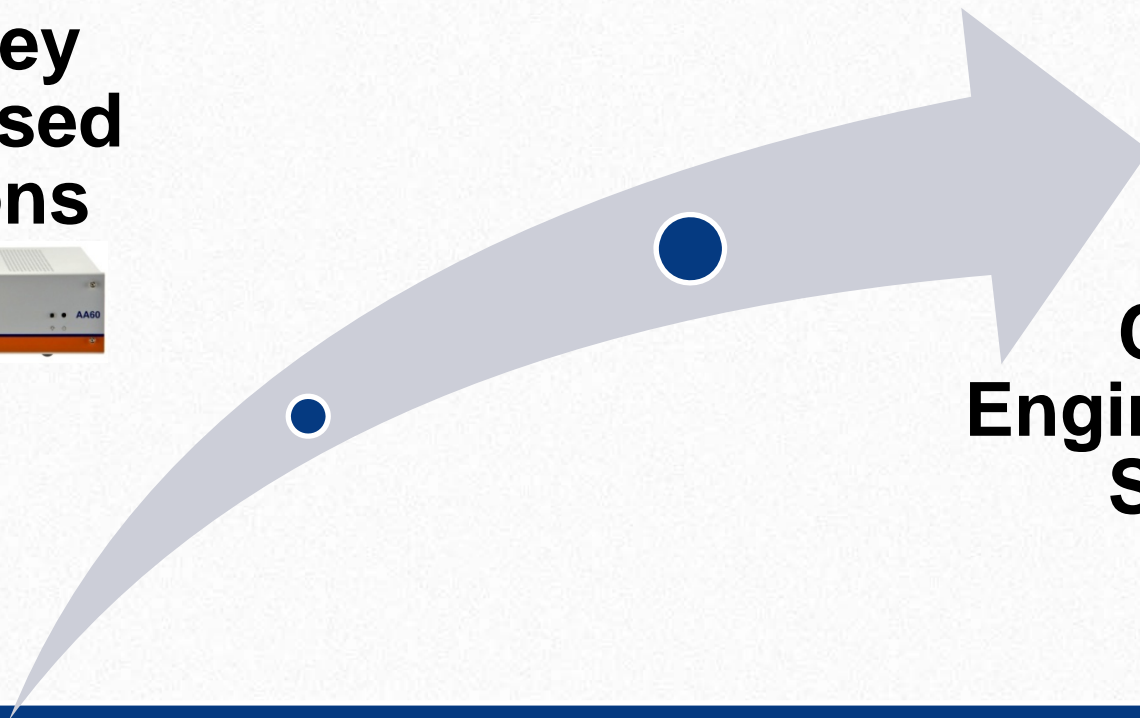
- IP PBX (based on OSS)
- Media Gateways (based on OSS)
- Soft Switch (based on OSS)

## Build you own – or have an integrator build a solution for you

- OSS Software
  - Commercial Software
  - Hardware Platforms
  - Training
  - Services
- } Tool Kit Components

# OSS Adoption as a Function of End User Technical Skill

**Turn-Key  
OSS-Based  
Solutions**



**Custom  
Engineered OSS  
Solution**

Lo .... End-User Technical Competency ..... Hi

# Open Source to SIP Trunks



  
Lo .....End-User Technical Competency ..... Hi

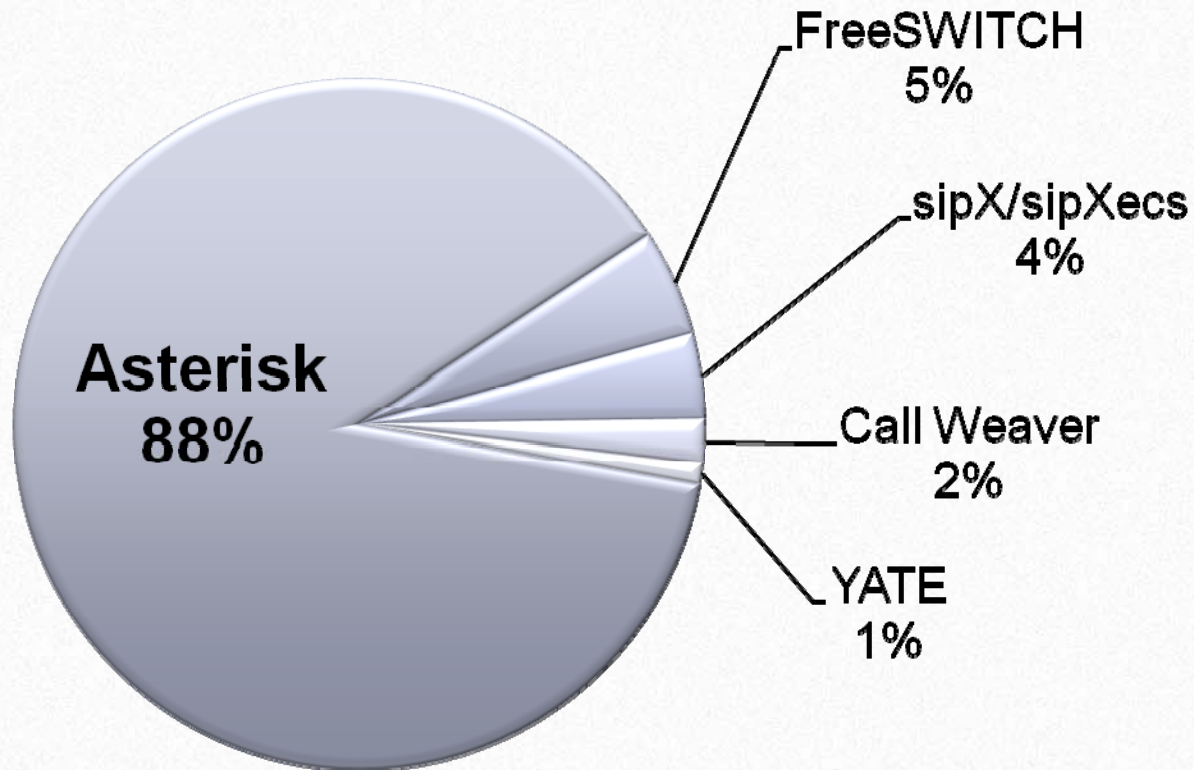
# What is needed to connect Asterisk to a SIP Trunk?

- SIP (SP) Provider Name
- Account ID: is the username SP provided.
- Password: user/administrator assigned
- Hostname/IP Address
- Callback Extension: The default extension to ring when receiving a call over this
- DTMF Mode: The DTMF mode to use when sending and receiving DTMF tones to/from SP
- Advanced Options: caller ID, Port #, various other params, codecs
- Set calling rules inbound/outbound, DIDs

(Abridged)

# Why is SIP trunking and Asterisk Important?

Based on most recent implementation



Source: Eastern Management Group

# Digium Perspective on the SIP Trunking Industry

<ul style="list-style-type: none"><li>• Small # Users</li><li>• Small companies</li><li>• Trials</li><li>• Analysts “Reports”</li><li>• Interoperability “Early”</li><li>• SIPConnect Important</li></ul>	<ul style="list-style-type: none"><li>• SMB Ramp-up</li><li>• Small Companies</li><li>• Enterprise Trials</li><li>• Analysts Market Share</li><li>• Interoperability “Good”</li><li>• SIPConnect Important</li></ul>	<ul style="list-style-type: none"><li>• SMB Stronghold</li><li>• Enterprise Acceptance</li><li>• Analysts Market Share</li><li>• Interoperability “non-issue”</li><li>• SIPConnect assumed</li></ul>	<ul style="list-style-type: none"><li>• What’s Next?</li><li>• RFC Updates?</li><li>• Who Knows?</li><li>• Embedded elements for social media?</li><li>• New media?</li></ul>
<hr/> <p>2007- 2008</p>	<hr/> <p>2009- 2010</p>	<hr/> <p>2011- 2012</p>	<hr/> <p>2013- 2014</p>

# Taking the Next Step with Asterisk?

1. See Steve Sokol in next session after this panel who will share some infrastructure applications
2. Stop into the Digium booth (#206) during exhibits to see open source in action
3. Attend Thursday sessions on open source: Tristan Degenhardt (8:30 AM) and Steve Sokol (2 PM)
4. Download AsteriskNOW ([www.asterisknow.org](http://www.asterisknow.org)) or Switchvox Free ([www.digium.com/switchvox](http://www.digium.com/switchvox)) and connect to a SIP Trunk and you have a business phone system

The End  
Thank You

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