

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
 - Session Initiation Protocol
 - 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 1st 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



LoEnd-User Technical Competency Hi

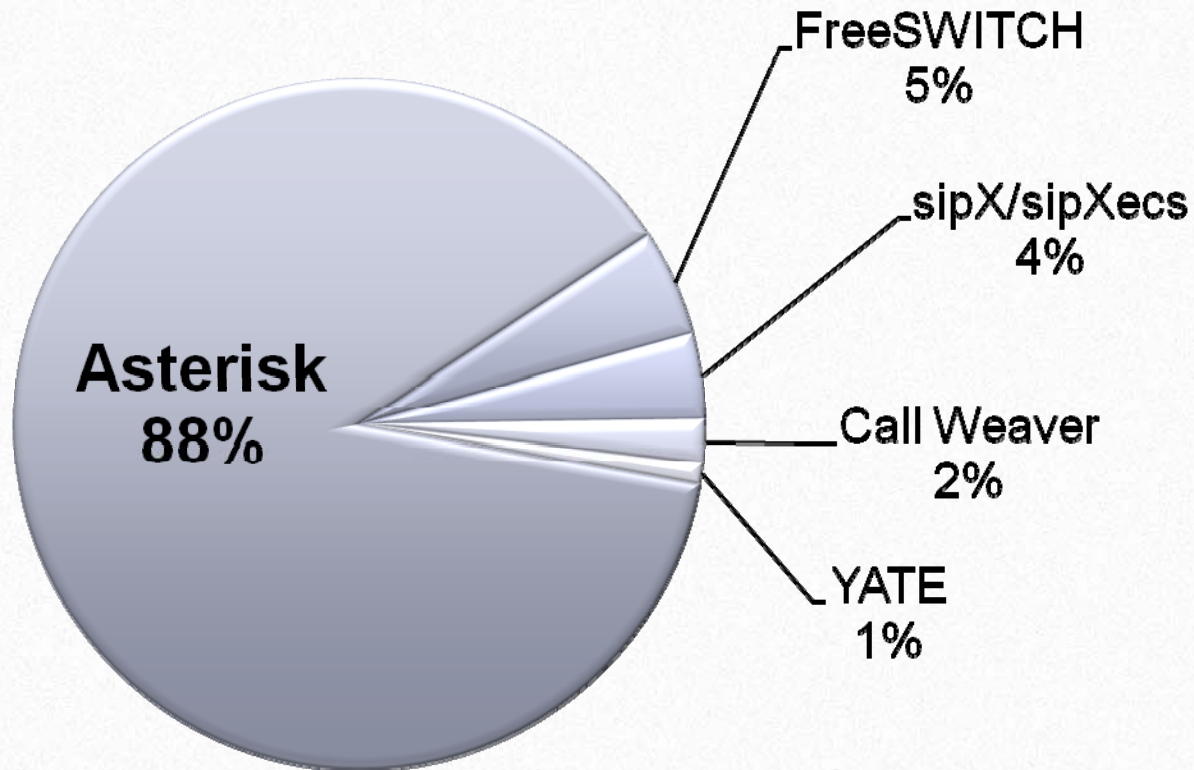
What is needed to connect Asterisk to a SIP Trunk?

- 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

• Small # Users • Small companies • Trials • Analysts “Reports” • Interoperability “Early” • SIPConnect Important	• SMB Ramp-up • Small Companies • Enterprise Trials • Analysts Market Share • Interoperability “Good” • SIPConnect Important	• SMB Stronghold • Enterprise Acceptance • Analysts Market Share • Interoperability “non-issue” • SIPConnect assumed	• What’s Next? • RFC Updates? • Who Knows? • Embedded elements for social media? • New media?
2007- 2008	2009- 2010	2011- 2012	2013- 2014

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) or Switchvox Free (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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