

# Asterisk Update OpenSIPS Summit 2017

David Duffett Worldwide Community Director, Asterisk Twitter: @dduffett Email: dduffett@digium.com





- Asterisk 13
- Asterisk 14
- Hope, Encouragement and Inspiration
- The Future
- The Challenge



## But first...

• Let's get to know each other better!



# You don't have to be great to start, but... you do have to start to be great! Joe Sabah



# Background

- Mark Spencer creates Asterisk in 1999
  - Started a Linux Support business
  - Needed a phone system
  - Did not like the options
    - Cost
    - Vendor lock in
  - Decided to create his own
  - Made it Open Source
  - Digium is born in 2002





# Background

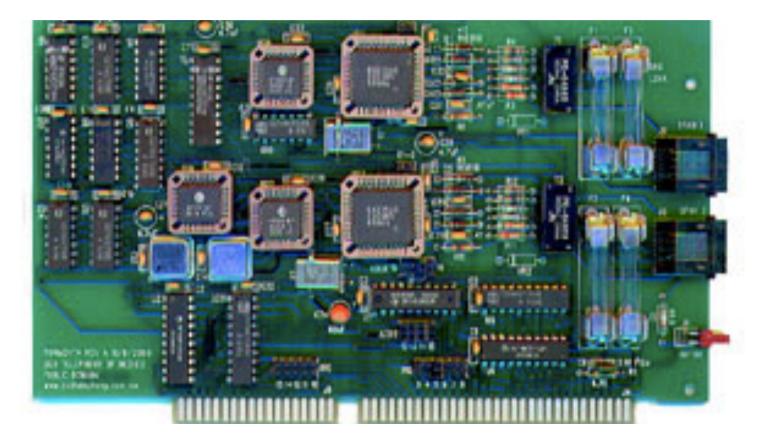
- Zapata Telephony project, Jim Dixon c.2000
  - Saw that the advanced in general purpose CPUs meant that they would be able to do things previously done only by expensive DSPs
  - Created Open Source Telephony Hardware



– Used with Asterisk



#### Zapata 'Tormenta' Card





#### Asterisk 13

- Current LTS, Building on Asterisk 12 which introduced
  - New SIP stack PJSIP
  - New API the ARI, or Asterisk RESTful Interface
  - New BRIDGING model



## Asterisk 14

- DNS Overhaul
- Publish Extension States to a SIP subscription server
- Playback of media from a remote HTTP server via a URI
- Enhanced ARI media manipulation
- ARI Channel creation more sophisticated
- wiki.asterisk.org



#### Asterisk 14

- Now we can publish extension state to an external entity with the SIP PUBLISH method.
- PUBLISH sip:presentity@example.com SIP/2.0 Via: SIP/2.0/UDP pua.example.com;branch=z9hG4bK652hsge To: <sip:presentity@example.com> From: <sip:presentity@example.com>;tag=1234wxyz Call-ID: 81818181@pua.example.com CSeq: 1 PUBLISH Max-Forwards: 70 Expires: 3600 Event: presence Content-Type: application/pidf+xml



## Asterisk 14: Why Publish?

- Remove state from Asterisk
- Improved scalability
- Allows offloading of individual subscription management
- Separating concerns



## Supported Body Types

- application/dialog-info+xml
- application/pidf+xml
- application/xpidf+xml



# pjsip.conf

```
[test-esc]
type=outbound-publish
server_uri=sip:172.16.0.100
from uri=sip:172.16.0.100
event=dialog
@body=application/dialog-info+xml
@context=^users
@exten=^1000
```



#### Autohint support

[users] autohints=yes

equivalent to:

exten => alice,hint,PJSIP/alice



## What can I connect with?

- OpenSIPS
- Asterisk
- Kamailio
- Or anything else that can act as a SIP presence aggregator



#### Credits

Many thanks to: Josh Colp <<u>jcolp@digium.com></u> <u>Kevin Harwell <kharwell@digium.com></u> <u>Asterisk development team</u>



## The Asterisk Wiki

- An excellent resource. Full of useful information and tutorials, etc.
- A couple of examples:

wiki.asterisk.org/wiki/display/AST/New+in+13 wiki.asterisk.org/wiki/display/AST/New+in+14



#### How do we learn?



#### The power to **PLAY**





# The Gift of <u>HOPE</u>

- Bicycle Powered (and Solar Powered) Asterisk!
- Brings communications to remote communities
- Deployments include
   Western Uganda







## The gift of <u>ENCOURAGEMENT</u>



# The gift of **INSPIRATION**

- The Coal Mine a heavily regulated environment
- Mission Critical literally Life or Death!





Jakub Klausa, SS7 Technologies



#### The Power to PLAY!



## Asterisk fosters GROWTH!

- The next generation of RT Communications
- Asterisk as a dynamic media server
- Scalable, resilient systems
- Partnering Projects
  - OpenSIPS
  - Homer
  - Docker



### AstriCon 2017

- October 3-5
- Orlando, FL in the USA
- <u>www.astricon.net</u>
  - Speaking
  - Exhibiting
  - Participating





#### Digium<sup>®</sup> IP Phones for Asterisk<sup>®</sup>

Digium IP Phones allow you to take full advantage of the flexibility and customization of Asterisk.



Simple Configuration – Plug-and-Play Provisioning – Powerful Apps – HDVoice Quality

www.digium.com/products/ip-phones

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# **Digium Phones**

- The only phones designed specifically with Asterisk in mind
- Standard SIP, but with extra goodies when used with a properly configured Asterisk
- Buy Digium to help the Asterisk project



# We are all on the same side!

- We are all part of something bigger:
   Open Source Communications Community
- Asterisk
- FreeSWITCH
- OpenSIPS
- Kamailio
- And others...



# You can have everything in life you want, if you will just help enough other people get what they want.

Zig Ziglar



# We have received so much. What can we give?

dduffett@digium.com

Twitter: @dduffett

