

Using Open Source and Closed Source Together

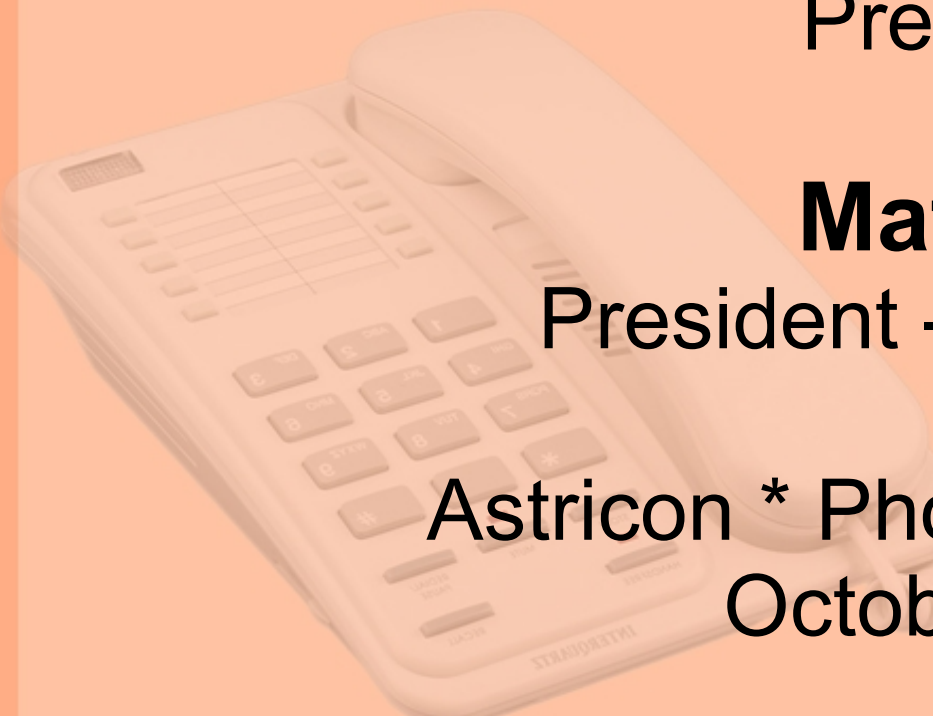
Presented by

Matt Florell

President - ViciDial Group

Astricon * Phoenix, Arizona, USA

October 14, 2009



IANAL

(I Am Not A Lawyer)

If you are concerned about the legality of using
Open Source with Closed Source then you should
contact a legal professional

Redistribution, Not Just “Use”

- With Open Source Software(OSS), not many restrictions on just “using” OSS with Closed Source Software(CSS)
- Redistribution of the application to another entity is where things begin to get complicated
 - Selling a router with OSS software on it
 - Offering software for download
 - Installing software on the machine that belongs to another entity(business, organization, person)

Options for CSS and OSS Together:

- Permissive license (BSD, MIT, Public Domain)
- GPL-derived license
 - Dual license - one open, one closed
 - Fork of closed source license
 - Socket integration
 - Network integration
 - Off-line or Batch integration
- Basic OSS application and Advanced CSS application
- Patent Issues

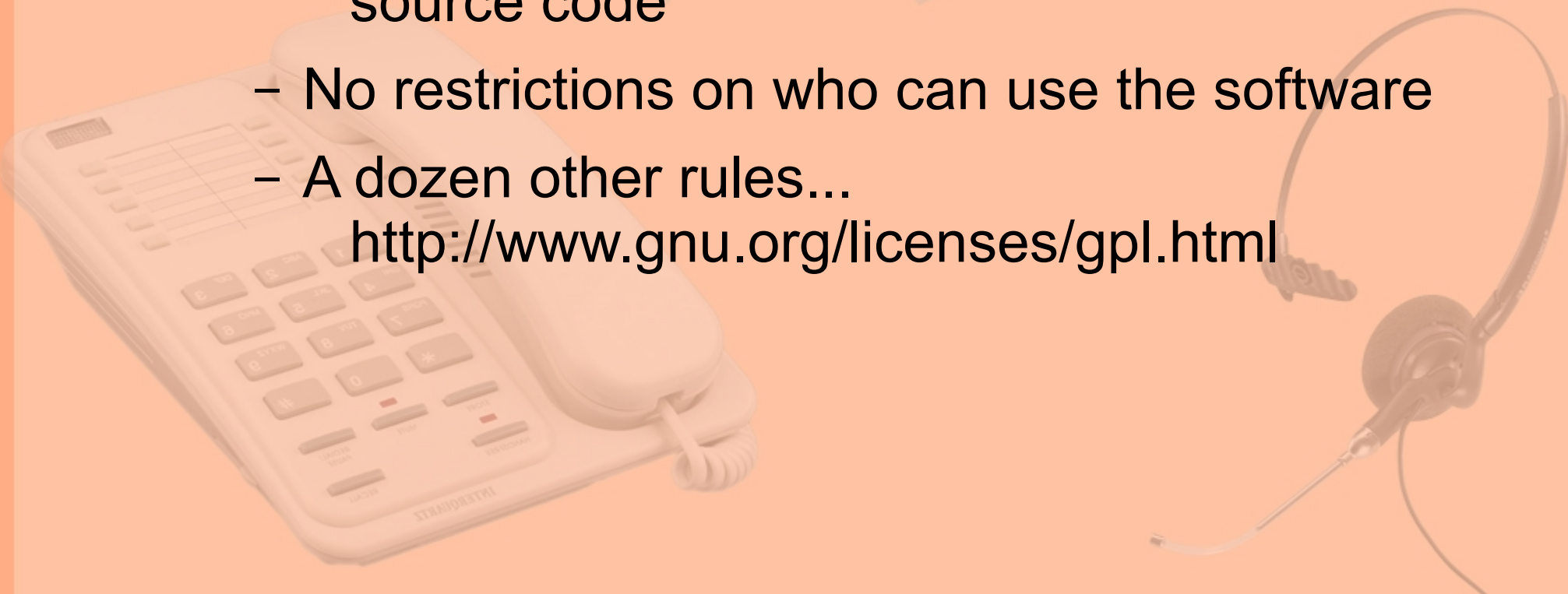
Free Permissive Licenses

- BSD and MIT licenses as well as Public Domain
- None, or very few, restrictions on taking the code and including it in closed-source product
 - Juniper Networks routers networking code is originally BSD licensed while the Juniper Networks product is closed source



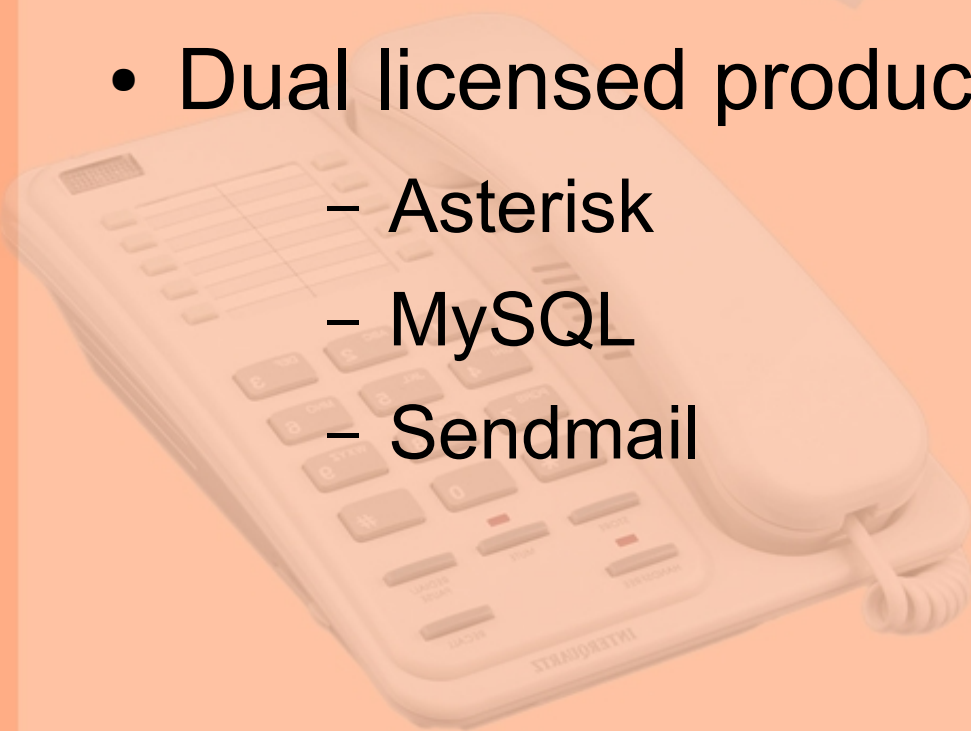
GPL-derived Licenses

- Restrictions on redistribution
 - Must offer source code to recipient of the application if offering a GPL-derived product
 - Copyright notice and entire license included in source code
 - No restrictions on who can use the software
 - A dozen other rules...
- <http://www.gnu.org/licenses/gpl.html>



Dual License: CSS and OSS

- One open source product and one closed source, both based upon the same code-base
- Only works if you have copyright distribution rights allowing for dual licensing
- Dual licensed product examples:
 - Asterisk
 - MySQL
 - Sendmail



Fork of Dual Closed Source

- Company acquires rights to redistribute Open Source Software as Closed Source from the Copyright holders
 - Closed source MySQL application with changes to MySQL source code, licensed as closed source through MySQL AB (Sun [Oracle])



Socket Integration

- Allows for a non-compiled option for real-time integration
- Closed-source product runs on the same server and open-source product connects to a socket
- A compiled-in open source module is often used to allow for the connection to the closed source application
- Sangoma and other devices can integrate with Asterisk and FreeSwitch in this way (Woomera protocol)

Network Integration

- Closed-source application or service is accessible over a networked connection
- An open-source module is often used to allow for the connection to the closed application
- Lumenvox Speech Recognition, Sangoma Call Progress Analysis and Howler Technologies Shared Codec Translation applications all integrate with Asterisk using this method
- Web-based services and data feeds such as stock market and weather data services also use this method

Off-Line or Batch Integration

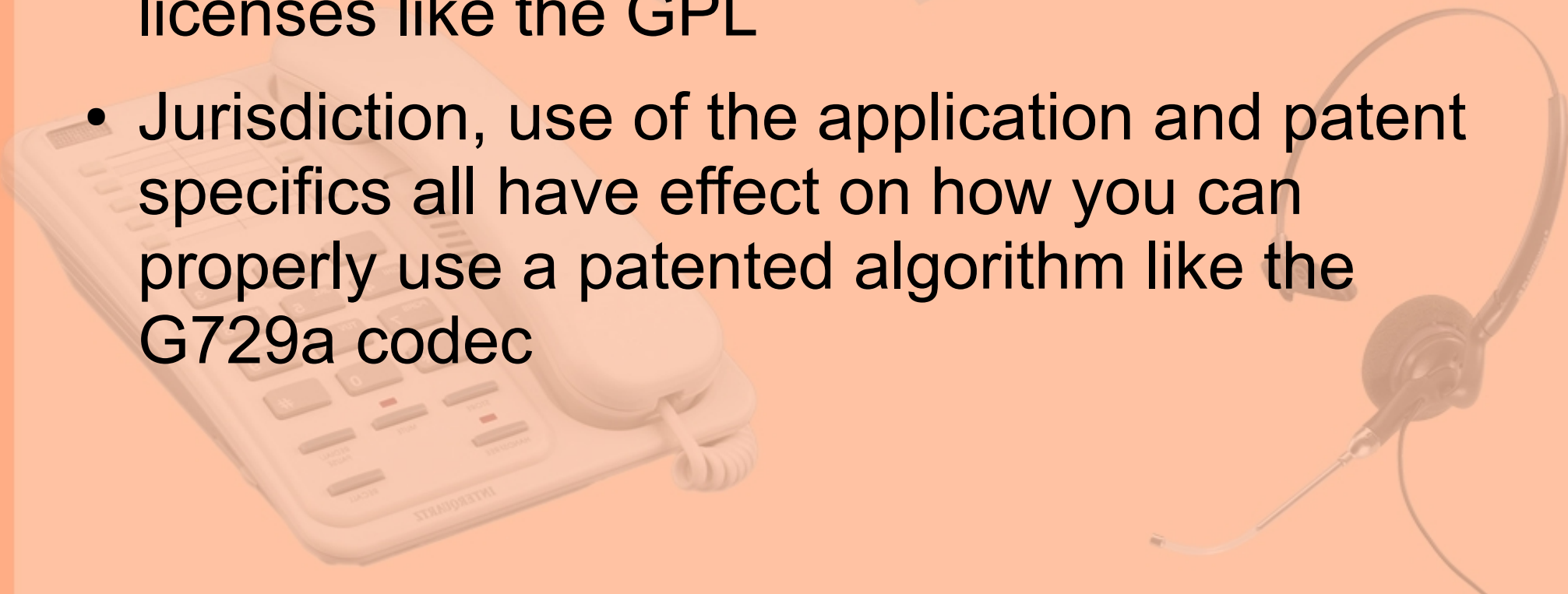
- Taking information generated by one application and using the output in the other application
 - Log files or batch-generated data output files
 - Configuration files
 - Creating static media files using dynamic data
- QueueMetrics and other Asterisk log analysis products use this method of integration
- ViciDial uses this method to integrate with Cepstral's Text to Speech application

Basic OSS, Advanced CSS

- Basic functionality and/or core functionality is Open Source while advanced functionality is Closed Source
- OrecX(Oreka) has an Open Source call recording core application and basic user interface, as well as a Closed Source advanced user interface
- Sendmail and JasperReports also have similar methods for their offerings

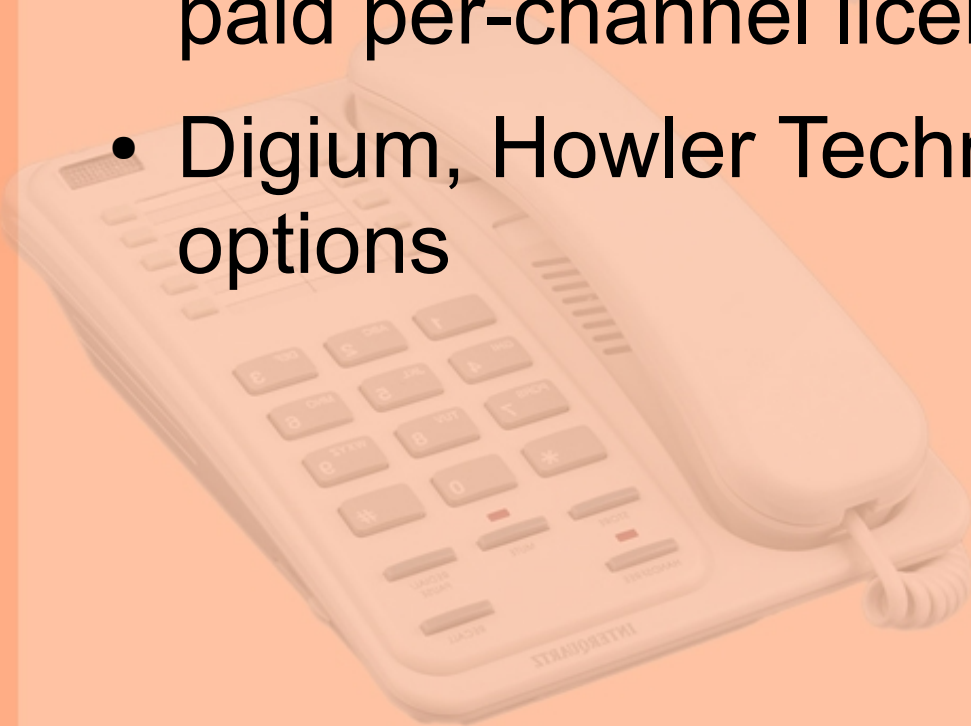
Patent Issues and Considerations

- Patent licenses are “use” licenses, and are separate from software distribution licensing
- Patent restrictions are not as easy to define or follow as compared to the software distribution licenses like the GPL
- Jurisdiction, use of the application and patent specifics all have effect on how you can properly use a patented algorithm like the G729a codec



Patent Issues: G729a codec

- G729 codec patent-holder requires purchase of a license for each instance of commercially-used G729 transcoding
- Protection for academic and testing use without paid per-channel licenses
- Digium, Howler Technologies and Open Source options



Companies and Applications:

Asterisk Software based PBX - www.asterisk.org

Digium Fax, G729 and Skype connectors for Asterisk - www.digium.com

Cepstral Text to Speech - www.cepstral.com

Lumenvox Speech Recognition - www.lumenvox.com

Sangoma Telco-interface cards and Call Progress Analysis - www.sangoma.com

Howler Technologies Codec translation software - www.howlertech.com

QueueMetrics Asterisk Log Analysis - www.queuemetrics.com

ViciDial Call Center - www.vicidial.com

OrecX/Oreka Call Recording - www.orecx.com

Juniper Networks - www.juniper.net

MySQL Database – www.mysql.com

Sendmail Email gateway– www.sendmail.org

JasperSoft Jasper Reports - www.jaspersoft.com



Thank you!

For more information, visit us at the ViciDial booth in the Expo hall, or go to:

<http://www.eflo.net> (presentations)

<http://www.oss-watch.ac.uk>

<http://www.opensource.org>

