What is Open Source?

- 59 OSI-approved "Open Source" licenses
  - Examples: GPL, BSD, Apache, MPL, etc...
  - Source code included with distributed application
  - No discrimination against any person or group and it must be language and technology neutral
  - License cannot be for only one piece of software
  - License must not restrict other bundled software
- Hardware designs can be Open Source as well:
  - Zaptel
  - PA1688

  Taken from OSI (Open Source Initiative) - http://www.opensource.org

What Open Source Software Can Be Used in the Call Center?

- Instant Messaging Applications
- VOIP Soft Phones
- Web Browsers
- Office and Productivity Applications
- Customer Relationship Management (CRM)
- Call Routing and PBX software
- Other Infrastructure services(email/web/etc...)

Instant Messaging Applications

- Pidgin (formerly GAIM)
  - Compatible with AIM, MSNM, Yahoo, ICQ, Jabber
  - Runs on Linux, Windows and Mac
- Kopete
  - Linux, KDE-only
- Jabber XML IM platform

VOIP Soft Phones

- Milliphone
- GONEPhone
- Twinkle
- IAX Client Lib
  - Iaxclient
  - TelGo
  - Kiax
  - WinIAX
  - Monophone

Web Browsers

- Firefox (Mozilla)
- Galeon
- Epiphany
- Kazehakase
- Skipstone
- Command-line browser
  - Elinks
  - Lynx
  - Netrik

Office and Productivity Applications

- Office programs (word processing, spreadsheets)
  - Open Office
  - Koffice
- Groupware (email and productivity tools)
  - Thunderbird
  - Evolution
  - Group-Office (web-based)
  - Open Xchange
- Wiki or online knowledgebase
  - MediaWiki (maintained by Wikipedia)
  - Tiki CMS

Customer Relationship Management (CRM)

- SugarCRM
- Vtiger
- Trac (also a Wiki solution)
- TinyERP
- Hermes

PBX and Call Routing Software

- Asterisk
- OpenSER
- FreeSwitch
- Yate
- CallWeaver
- sipX

Other Infrastructure Services

- Web servers
  - Apache
  - Tomcat
  - thttpd
- Email server
  - Sendmail
  - postfix
- Database
  - MySQL
  - PostgreSQL

Reasons to use Open Source

- Increased internal control over the code-base, the ability to change to code to suite your needs
- Software will never be end-of-life
- No vendor lock-in
- Most OSS has little or no licensing costs
- More flexibility of hardware used:
  - Standard server/workstation hardware
  - Multiple Operating Systems supported
  - Dozens of VOIP hard-phones compatible
- More protocols supported: (SIP/IAX/H323/MGCP/SCCP)

Issues With Using Open Source

- More internal resources needed to maintain and customize systems(unless outsourcing)
- No large professional support options for smaller OSS projects
- Lack of detailed documentation on most Open Source Projects

Reasons for using Proprietary Solutions

- Often Proprietary vendors are large companies with large support infrastructure
- Hardware is guaranteed to work and is tested
- Full feature compatibility across product offerings from vendor
- In the world of VOIP, proprietary vendors created most of the standards in use today

Issues with using Proprietary Solutions

- Less flexibility with hardware options
- Closed source, difficult and often expensive to customize to a high degree
- Limited options for support
- Chance of end-of-life of product line
- Rigid pricing structure of products, and higher cost
- Per seat, per feature, per phone and per computer licensing complicates expansion

Is open source right for you?

- Do you have the IT resources to install and maintain the applications?
- Do you want control over the source code?
- Do you want to be able to modify the software to suit your company's needs?
- Do you want to reduce your overall long-term costs?

Case Study: 200 seat Call Center

- Started with 200-seat Proprietary inbound/outbound system (per seat cost $1200)
  - Additional costs of Windows licensing for workstations and servers
  - Mandatory monthly maintenance costs from vendor

Case Study: 200 seat Call Center

- Switched to Asterisk-based system, no license costs, and was able to add features that were impossible with their existing proprietary system
  - Changes to the source code were made to deeply integrate the functions of the call center with their internal CRM system
  - Switched to Linux for workstations, no license costs, and lower maintenance costs

Case Study: 200 seat Call Center

- Open Source Packages used:
  - Slackware Linux
  - Asterisk Open Source Edition
  - astGUIclient/VICIDIAL call center suite
  - Mozilla Firefox on the agent stations

Case Study: 100 seat Call Center

- Existing systems all Windows-based and IT staff all Windows-trained
  - New staff would need to be brought in, as well as extensive training of existing staff to convert to Linux-based systems

Case Study: 100 seat Call Center

- High degree of customization of existing systems done by outside firms on existing system
  - Existing CRM system was closed source as well and was actually partially built-in to their call center software, making a switch very difficult and expensive

Case Study: 100 seat Call Center

- Very small budget Open Source conversion project
  - Resources were not available to make the move to Open Source
  - Decided to move to another Proprietary vendor with a similar platform to what they had been running

Case Study: 500 seat inbound Call Center

- Started new call center with Asterisk to handle inbound calls and added servers as inbound volume grew
  - Started with a single high-end server, then added machines to handle recording and monitoring
  - After growing, they added another large server and balance the call load between the two

Case Study: 500 seat inbound Call Center

- All agents use Proprietary SIP hard phones
- Agent workstations are Windows-based
- Open Source Packages used:
  - Fedora Core Linux
  - Asterisk Open Source Edition
  - OrecX Call reording and monitoring solution

Thank you

For more information on Open Source software and licenses, go to:

http://www.opensource.org