The Ins and Outs of Web Browser Embedded Soft-Phones

Presented by

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Astricon 2011 * Denver, CO, USA
October 26, 2011
What is a Browser Embedded Phone?

• Runs inside the web browser, not as a separate application
• Usually requires no configuration from the end user since configuration can be set by the web page the phone is included inside
• Requires application framework to run:
  – Java
  – ActiveX
  – Flash
  – Browser plug-in based
Hello and thank you for calling ACME Widgets, My name is Admin, can I schedule an appointment for you to review our lovely widgets?

Appointment Date: 2010-08-09
Appointment Time: 12:44
Favorite Color:
- Red
- Blue
- Green
- Purple

Appointment Notes:

Discussion Topics:
- Price
- Color
- Texture
- Shipping

Contact ID: 7275561113
Nearest City: Chicago

Phone to dial:
Enter number to dial...
Account:
Your Phone
Why Use a Browser Embedded Phone?

• For at-home users, much less tech support required because no configuration needed
• Software versions can be updated on the server instantly with no user action needed
• Client settings, like allowable audio codecs and phone accounts, can be defined centrally on the server
• Load-balanced logins across multiple servers made easier because of dynamic configuration settings defined on page load
Run-time Environments Used

- Java
  - From Sun Microsystems (now Oracle)
- Flash
  - From Adobe
- ActiveX
  - From Microsoft
- Browser plug-in
  - Open framework, XPI
Java Run-time Engine

- Owned by Oracle
- Run-time engines available for every major operating system
- Issues:
  - Run-time versions consistency
  - Security issues with Java
  - Long running phone calls
  - Audio quality and connection to the OS audio resources
Flash Run-time Engine

- Owned by Adobe
- Run-time engines available for every major operating system
- Issues:
  - Security issues with Flash
  - Long running phone calls
  - Audio quality and connection to the OS audio resources
- More resource intensive, requires proxy server
ActiveX Run-time Engine

- Owned by Microsoft
- Run-time engines available only for Microsoft Operating Systems
- Issues:
  - Does not support Linux or Mac OS
  - Components require installation
  - Security issues with ActiveX
Browser Plug-in

- Open XPI framework
- Available for every major operating system
- Issues:
  - Cross-browser support can be difficult
  - Less flexible architecture
  - Security issues
Application Installation

- Install components on a web server
- Embed object in HTML of web page
- Flash requires a media server to transfer audio to VOIP server and SIP messages
- Agent-side allow permissions or plug-in install
Doddlephone

- Java applet
- Allows user configuration
- Website: doddlephone.com
- Javascript API
- SIP protocol
- Codecs: G.711 / GSM / SPEEX / G.729 (royalty fees) / iLBC
- Multiple web browser support
- Windows, Linux, MacOS support
IAX Telephone 2

- Java applet
- Allows user configuration
- Website: silicontechnix.com
- Javascript API
- IAX2 protocol
- Codecs: G.711 / GSM / SPEEX / G.729 (royalty fees) / iLBC / lpc10
- Multiple web browser support
- Windows, Linux, MacOS support
Mexaur Webphone

- Java applet
- Website: mexuar.com
- Javascript API
- IAX2 protocol
- Codecs: G.711u
- Multiple web browser support
- Windows, Linux, MacOS support
Mizutech Webphone

- Java applet
- Website: mizu-voip.com
- Javascript API
- SIP protocol
- Codecs: G.711 / G.729 / GSM / SPEEX
- Multiple web browser support
- Windows, Linux, MacOS support
Moziax Webphone

- Firefox plug-in
- Website: moziax.mozdev.org
- Javascript API
- IAX2 protocol
- Codecs: G.711
- Firefox support only
- Windows, Linux, MacOS support
- Not under active development
Sippy Webphone

- Java applet
- Website: sippysoft.com
- Javascript API
- SIP protocol
- Codecs: G.711 / GSM
- Multiple web browser support
- Windows, Linux, MacOS support
- Licensed per domain name, perpetual license
TringPhone

- Flash-based
- Website: tringme.com
- Javascript API
- SIP protocol
- Codecs: n/a
- Multiple web browser support
- Windows, Linux, MacOS support
- Pay-per-minute for SIP calls
Ozeki Webphone

- Flash-based
- **Website:** [http://www.ozekiphone.com/](http://www.ozekiphone.com/)
- SIP protocol
- Codecs: G711 / iLBC / G722 / G729 / SPEEX / GSM
- Multiple web browser support
- Windows, Linux, MacOS support
- Requires installation of proxy server software on a Windows server on the Internet
- Licensed per port, perpetual license
Red5 Webphone

- Flash-based
- **Website:** http://code.google.com/p/red5phone/
- Javascript API
- SIP protocol
- Codecs: G711
- Multiple web browser support
- Windows, Linux, MacOS support
- Requires proxy server for media and SIP messages
- Open Source
Red5 Webphone audio path

- Really RTMP audio transport, not a true webphone
- Requires server processes running to pass through audio and supply SIP messages
XeniaLab Webphone

- Browser-based plug-in
- Website: hand4shake.com
- SIP protocol
- Codecs: n/a
- Multiple web browser support
- Windows, Linux, MacOS support
Zoiper Webphone

- ActiveX and NPAPI
- Website: zoiper.com
- SIP and IAX2 protocols
- Codecs: GSM / a-law / u-law / Speex / iLBC 30 / iLBC 20
- Multiple web browser support
- Windows support only
- Licensed per domain name, perpetual license
Webphone Applications in the Call Center

- Agent interface integration
- Live blind monitoring of calls (local or remote)
- Listening to archive recordings
- Conferencing, coaching agents
- Quality Control
- Agent Training
Commercial Website Applications

- No phone number needed
- No telco costs
- Click-to-call from flash-based phone
  - Shopping assistance
  - Customer service
- Talk with other website users in real-time
  - Live voice chat
Thank you!

For more information, go to:

www.vicidial.org