



February 2-4, 2011 - Miami Beach Convention Center in Miami, FL

# Browser Embedded Phones for the Call Center

Presented by

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ITexpo 2011 \* Miami, FL, USA

February 4, 2011

Visit: [www.itexpo.com](http://www.itexpo.com)

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# 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



# Web Page with Embedded Phone

Logged in as User : 6666 on Phone: IAX2/cc330 to campaign: TESTCAMP

GROUPS LOGOUT

WebPhone View -

**VICIdial** SCRIPT FORM

2010-08-02 11:45:13 session ID: 8600051 Calls in Queue: 1

**LIVE CALL**

Web Phone:

STATUS: Incoming: 727-555-1212 Group- TEST inbound 3 Fronter: - 7275551113

seconds: 21

[refresh](#)

Hello and thank you for calling ACME Widgets, My name is Admin, can I schedule an appointment for you to review our lovely widgets?

PAUSE RESUME

ALT PHONE DIAL

RECORDING FILE:

20100802-114450\_727555...

RECORD ID: 1839

STOP RECORDING

WEB FORM

WEB FORM 2

PARK CALL

TRANSFER - CONF

QUICK TRANSFER

RE-QUEUE CALL

HANGUP CUSTOMER

SEND DTMF

Appointment Date  [help+](#)

Appointment Time   [help+](#)

- Favorite Color
- Red
  - Blue
  - Green
  - Purple

[help+](#)

Appointment Notes

[help+](#)

Discussion Topics

- Price
- Color
- Texture
- Shipping

[help+](#)

Contact ID  [help+](#)

Nearest City  [help+](#)

**ZOIPER**

Phone to dial

Account

Agent web-client version: 2.4-281 BUILD: 100726-1233

Server: 192.168.198.5 [Hide Calls In Queue](#)

**HOT KEYS INACTIVE**

MUTE  [Agents View +](#)

Calls In Queue:

PHONE	NAME	WAIT	AGENT	CALL GROUP	TYPE
<a href="#">TAKE CALL</a>	7275551212	Testing	0:18	7275551113 -	TEST_IN3 - TEST inbound 3

# Why Use a Browser Embedded Phone?

- For at-home agents, 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

# 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
- Agent-side allow permissions or plug-in install

# Doddlephone

- Java applet
- Allows user configuration
- Website: [doddlephone.com](http://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](http://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](http://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](http://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](http://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](http://sippysoft.com)
- Javascript API
- SIP protocol
- Codecs: G.711 / GSM
- Multiple web browser support
- Windows, Linux, MacOS support
- Licensed per domain name



# TringPhone

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



# XeniaLab Webphone

- Browser-based plug-in
- Website: [hand4shake.com](http://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



# 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



# Monitor Page with Embedded Phone

**VICIdial** [Users](#) [Campaigns](#) [Lists](#) [Scripts](#) [Filters](#) [Inbound](#) [User Groups](#) [Remote Agents](#) [Admin](#) [Reports](#)

Real-Time Report [Choose Report Display Options](#) [RELOAD NOW](#) [MODIFY](#) [SUMMARY](#) refresh: 4 [webphone -](#)

Phone: 0000000000 State: Established

[+ VIEW MORE](#) [HIDE USER GROUP](#) [SHOW SERVER INFO](#) [HIDE WAITING CALLS](#) [SHOW IN-GROUP STATS](#) [SHOW PHONES](#) [HIDE CUSTPHONES](#)  
 DIAL LEVEL: 1.327 TRUNK SHORT/FILL: 0/0 FILTER: NONE TIME: 2011-01-31 13:34:58  
 DIALABLE LEADS: 111378 CALLS TODAY: 5 AVG AGENTS: 0.14 DIAL METHOD: ADAPT\_TAPERED  
 HOPPER (min/auto): 2129/4 DROPPED / ANSWERED: 3/4 DL DIFF: 0.10 STATUSES:  
 LEADS IN HOPPER: 180 DROPPED PERCENT: 75.00% DIFF: 72.41% ORDER: DOWN  
 TEST: 1

2 current active calls   0 calls ringing   **1** calls waiting for agents   0 calls in IVR  
 2 agents logged in   1 agents in calls   **1** agents waiting   0 paused agents   0 agents in dead calls   0 agents in dispo

VICIDIAL: Calls Waiting 2011-01-31 13:34:58

STATUS	CAMPAIGN	PHONE NUMBER	SERVER_IP	DIALTIME	CALL TYPE	PRIORITY
LIVE	TESTCAMP	9999058829	192.168.198.5	0:12	OUT	52

VICIDIAL: Agents Time On Calls Campaign: |ALL-ACTIVE| 2011-01-31 13:34:58

STATION	USER	SHOW ID	INFO	USER GROUP	SESSIONID	STATUS	PAUSE	CUST PHONE	MM:SS	CAMPAIGN
R/7777	testing	±	ADMIN	8300	<a href="#">LISTEN</a>	READY			17947:50	ASTRICON
8300@default10	test agent	±	ADMIN	8600051	<a href="#">LISTEN</a>	INCALL I		9999028042	0:10	TESTCAMP

2 agents logged in on all servers  
 System Load Average: 0.22 0.11 0.03 M



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# Thank you!

**For more information, go to:**

<http://www.vicidial.org>