

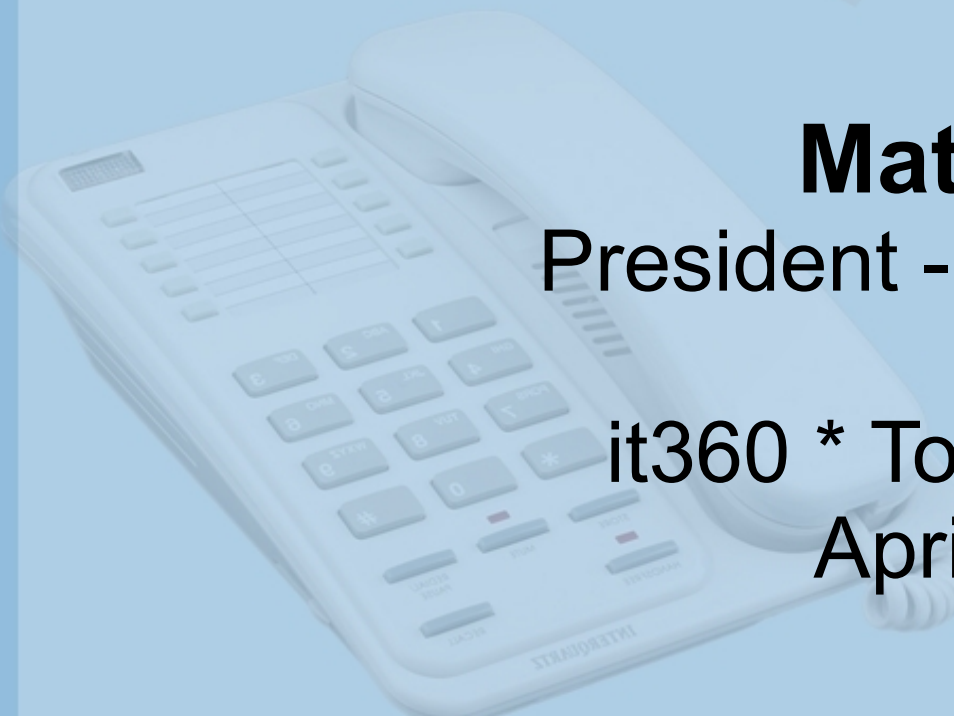
# Open Source Call Centres Case Studies: 40 and 200 Seats

Presented by

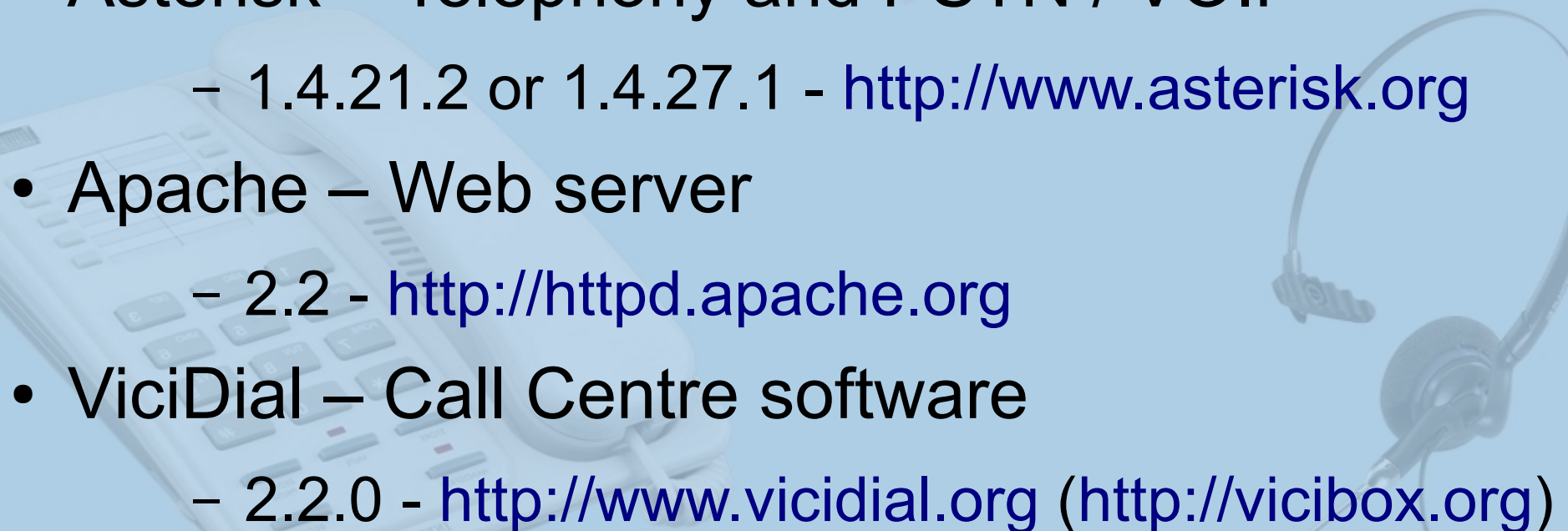
**Matt Florell**

President - ViciDial Group

it360 \* Toronto, Canada  
April 7, 2010

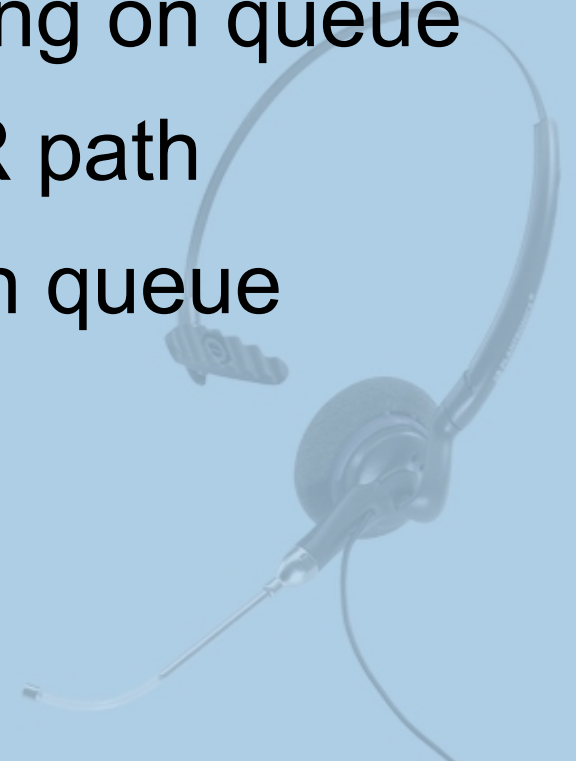


# Open Source Software Used in Both Case Studies:

- Linux – Operating System
    - OpenSuse - <http://www.opensuse.org>
    - Ubuntu - <http://www.ubuntu.com>
  - Asterisk – Telephony and PSTN / VOIP
    - 1.4.21.2 or 1.4.27.1 - <http://www.asterisk.org>
  - Apache – Web server
    - 2.2 - <http://httpd.apache.org>
  - ViciDial – Call Centre software
    - 2.2.0 - <http://www.vicidial.org> (<http://vicibox.org>)
- 

# 40 Seat Outsource Call Centre: Requirements

- Inbound / Outbound blended call handling
- Record all calls
- Inbound IVR with web configuration
- Agent dynamic web links depending on queue
- Reporting based on DIDs and IVR path
- Ability to transfer calls based upon queue



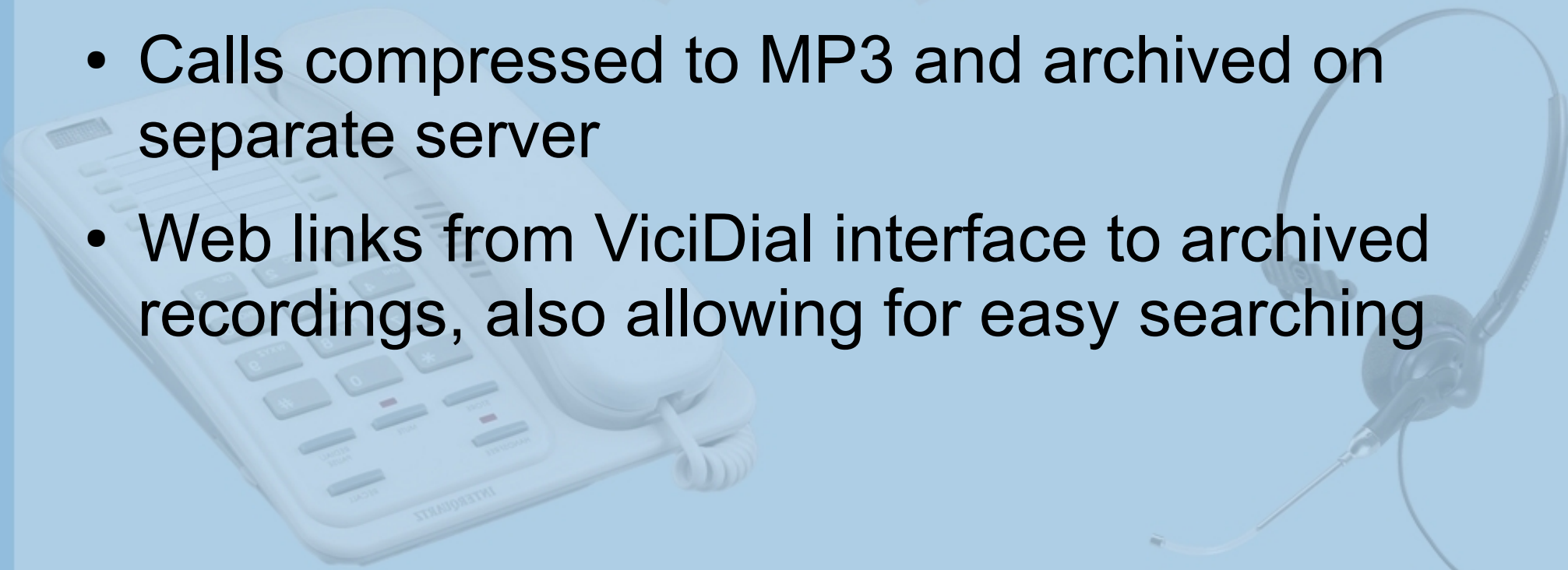
# 40 Seat Outsource Call Centre: Blended Call Handling

- Manual dial with inbound call handling
- Predictive outbound with inbound
- Broadcast outbound notifications with press 1 to talk to agent



# 40 Seat Outsource Call Centre: Call Recording

- All calls recorded when the call arrives at the agent
- Option for audio recording and time logging for calls during their IVR time
- Calls compressed to MP3 and archived on separate server
- Web links from ViciDial interface to archived recordings, also allowing for easy searching





# 40 Seat Outsource Call Centre: Queue-based Agent web links

- Ability to link to specific website per queue
- Ability to have custom variables per agent per queue (extranet logins, agent codes, etc...)

Inbound Groups: ?

INBOUND GROUP	RANK	CALLS	WEB VARS
<input type="checkbox"/> <a href="#">AAA ALL TEST</a> - Alpha test	4	0	user@pass:
<input checked="" type="checkbox"/> <a href="#">AGENTDIRECT</a> - Single Agent Direct Queue	0	0	
<input type="checkbox"/> <a href="#">AGENTDIRECT9</a> - always on agentdirect	0	0	
<input checked="" type="checkbox"/> <a href="#">CL GALLERIA</a> - TEST inbound galleria	5	1	var1=123&var2=321&var3=22
<input type="checkbox"/> <a href="#">SALESLINE</a> - Training Sales Line	-6	0	
<input type="checkbox"/> <a href="#">TESTCAMP_IN</a> - test duplicate	8	0	
<input checked="" type="checkbox"/> <a href="#">TEST_IN</a> - TEST inbound	8	1	test=test12345&
<input checked="" type="checkbox"/> <a href="#">TEST_IN2</a> - TEST inbound 2	1	2	2222=3333&
<input checked="" type="checkbox"/> <a href="#">TEST_IN3</a> - TEST inbound 3	-9	3	bob=bob&2=1&

to VICIdial - Mozilla Firefox

View History Bookmarks Tools Help

http://user@pass:www.customercrm.org/viewrecord.asp?customer\_phone=9055552314|

# 40 Seat Outsource Call Centre: DID and IVR reporting

**VICdial** [Users](#) [Campaigns](#) [Lists](#) [Scripts](#) [Filters](#) [In-Groups](#) [User Groups](#) [Remote Agents](#) [Admin](#) [Reports](#)

Date Range:

2010-01-12 00:00:00 to 2010-01-12 23:59:59

Inbound Groups:

CALLMENU - IVR  
XMLPULL - Dynamic Application  
AGENTDIRECT - Single Agent Direct Queue

[MODIFY](#) | [REPORTS](#) | [CLOSER REPORT](#)

Shift: ALL

IVR Stats Report: |CALLMENU|XMLPULL|AGENTDIRECT| 2010-01-12 08:16:16

Calls taken into this IVR: 2832

Calls with no CallerID: 0

Unique Callers: 2133

IVR	QUEUE	QUEUE	QUEUE	IVR	TOTAL	
CALLS	CALLS	DROP	DROP	AUG	AUG	CALL PATH
		CALLS	PERCENT	TIME	TIME	
371	341	38	11.14*	5	263	SALES_IN
347	322	33	10.25*	34	357	SERVICE_IN / SERVICE_ENGLISH / SERVICE_QUESTIONS
329	320	21	6.56*	42	406	SALES_IN / SALES_UK
130	170	22	12.94*	5	344	TECH_SUPPORT
90	83	10	12.05*	81	373	SERVICE_IN / SERVICE_ENGLISH / SERVICE_QUESTIONS / SERVICE_QUEUE
81	64	7	10.94*	5	268	SALES_2
78	83	9	10.84*	87	522	SERVICE_IN / SERVICE_ENGLISH / SERVICE_QUESTIONS / SERVICE_QUEUE_2
71	67	9	13.43*	5	323	SALES_3
65	90	11	12.22*	5	295	SALES_4
65	68	14	20.59*	38	361	SERVICE_2 / SERVICE_QUEUE_3
63	59	11	18.64*	5	315	SALES_5
52	51	2	3.92*	95	423	SERVICE_IN / SERVICE_ENGLISH / SERVICE_QUESTIONS / SERVICE_QUEUE_6
50	46	15	32.61*	5	137	SALES_6
41	37	5	13.51*	5	238	SALES_7
38	25	5	20*	46	231	SERVICE_2 / SERVICE_QUEUE_3 / SHIPPING_AGI_XML
33	31	5	16.13*	30	218	SERVICE_3 / SERVICE_QUEUE_4
33	22	6	27.27*	27	262	SERVICE_IN / SERVICE_ENGLISH
29	24	3	12.5*	35	392	SERVICE_IN / SERVICE_QUEUE_5 / SERVICE_QUESTIONS_2
27	25	4	16*	5	252	EMPLOYMENT_1
26	25	6	24*	34	255	SALES_8 / SALES_UK
25	20	0	0*	97	338	SERVICE_IN / SERVICE_QUEUE_5 / SERVICE_QUESTIONS_2 / SERVICE_QUEUE_7
23	13	2	15.38*	29	180	SALES_5 / SHIPPING_AGI_XML
21	0	0	0*	53	53	SERVICE_3 / SERVICE_QUEUE_4 / SERVICE_QUEUE_8
21	0	0	0*	5	5	SERVICE_IN
19	6	2	33.33*	5	44	SALES_9
19	12	1	8.33*	61	178	SERVICE_3 / SERVICE_QUEUE_4 / SERVICE_QUESTIONS_3 / SHIPPING_AGI_XML
18	15	0	0*	65	245	SALES_8 / SALES_UK / SERVICE_QUESTIONS_4 / SHIPPING_AGI_XML
18	15	5	33.33*	5	154	PRESALES_1
16	16	1	6.25*	47	273	SERVICE_3 / SERVICE_QUEUE_4 / SERVICE_QUESTIONS_5
16	13	6	46.15*	5	165	PRESALES_2
15	0	0	0*	5	5	EMPLOYMENT_2





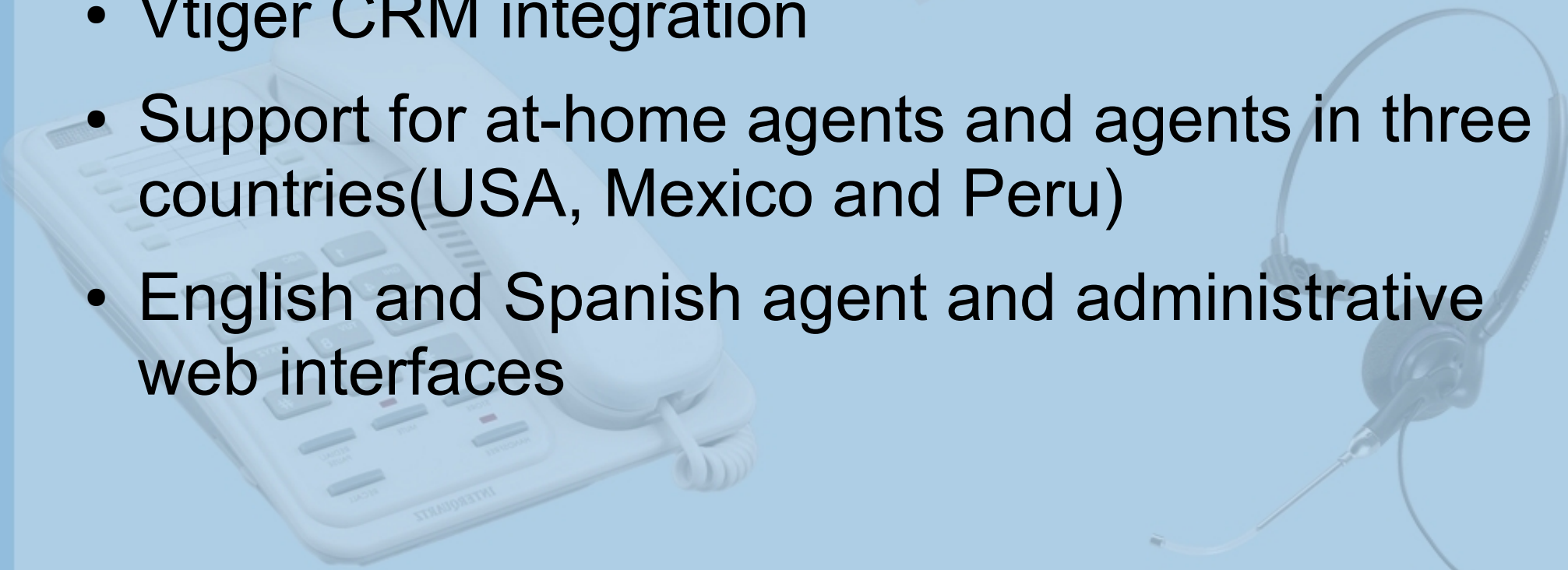
# 40 Seat Outsource Call Centre: Conclusions

- Faster setup time for new customers
- More flexible call routing
- Easier expansion ability as they transition more customer accounts from their old solution
- Faster and more accurate accounting of time



# 200 Seat Inbound Call Centre: Requirements

- Inbound call handling only
- Record all calls
- Inbound DID and IVR web configuration
- Vtiger CRM integration
- Support for at-home agents and agents in three countries(USA, Mexico and Peru)
- English and Spanish agent and administrative web interfaces



# 200 Seat Inbound Call Centre: DID Reporting

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

2010-01-04 to 2010-01-11

7275551211 - General Inbound  
7275551235 - Sales Inbound  
default - Default DID

ALL  [MODIFY](#) | [REPORTS](#)

Inbound DID Report 2010-01-12 05:43:17

Time range 8 days: 2010-01-04 00:00:00 to 2010-01-11 23:59:59

DID Summary:

DID	DESCRIPTION	ROUTE	CALLS
<a href="#">7275551211</a>	General Inbound	IN_GROUP	197
<a href="#">7275551235</a>	Sales Inbound	IN_GROUP	123
TOTALS			320

Date Summary:

SHIFT	DATE-TIME RANGE	CALLS
	2010-01-04 00:00:00 - 2010-01-04 23:59:59	33
	2010-01-05 00:00:00 - 2010-01-05 23:59:59	36
	2010-01-06 00:00:00 - 2010-01-06 23:59:59	28
	2010-01-07 00:00:00 - 2010-01-07 23:59:59	35
	2010-01-08 00:00:00 - 2010-01-08 23:59:59	54
	2010-01-09 00:00:00 - 2010-01-09 23:59:59	38
	2010-01-10 00:00:00 - 2010-01-10 23:59:59	7
	2010-01-11 00:00:00 - 2010-01-11 23:59:59	89
TOTALS		320

----- HOLD TIME, CALL AND DROP STATS

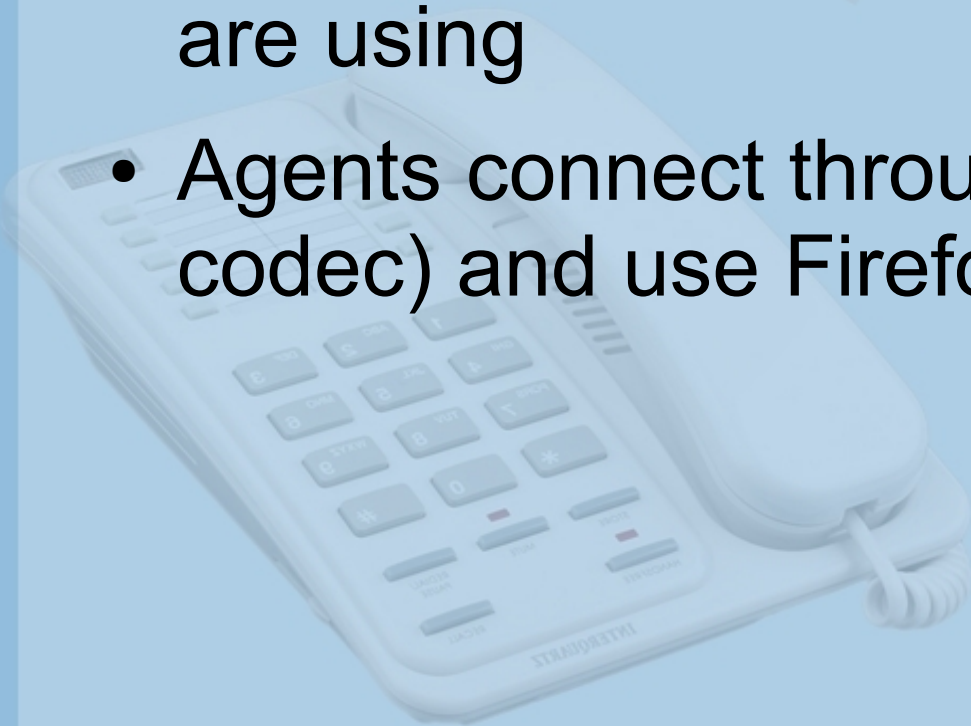
GRAPH IN 15 MINUTE INCREMENTS OF AVERAGE HOLD TIME FOR CALLS TAKEN INTO THIS IN-GROUP

TIME	CALLS HANDLED
15 MIN INT	0 2 4 6 8 10 13 15 18 20 23 25 28 29   TOTAL
+00:00-00:15+	
00:15-00:30	



# 200 Seat Inbound Call Centre: Agent Locations

- Hosted by ViciHost.com at a large co-location facility in Tampa, Florida, USA
- Co-location facility has good data paths to Peru and Mexico networks that other client locations are using
- Agents connect through soft-phones(GSM codec) and use Firefox for the agent interface



# 200 Seat Inbound Call Centre: Multi-Lingual Web Interfaces

- Full Spanish and English Agent web interfaces as well as custom web interfaces and IVR prompts are all bi-lingual
- ViciDial agent web interface available in 13 languages:

- English
- Spanish
- French
- German
- Italian
- Portuguese
- Brazilian Portuguese
- Dutch
- Greek
- Russian
- Polish
- Slovak
- Traditional Chinese







# Thank you!

For more information, go to:

[www.vicidial.org](http://www.vicidial.org)

Or visit our booth in the expo hall

