



How to Get VICIdial Contact Center Clusters Talking to each other, and more new features...

Presented by

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The Application

- Separate “Fronter” VICIdial clusters, that connect with customers through inbound and outbound phone calls, and sending some of those customer calls to agents on a separate “Verification” VICIdial cluster
- Allow customer information(name, address, account code, etc...) to be sent along with phone call to an agent on the separate VICIdial cluster

The Challenge

Make this easy to do:

- Web-configurable through existing VICIdial web admin
- Limited sharing of customer data for only live-transferred calls

Previous “Solution”

- Lots of custom manual configurations on every server on the frontier and verification clusters
- Limited database access from one cluster to the other cluster
- Custom data scripting on both clusters

The Problems

- Very difficult and very time consuming to set up
- Data security difficult to configure
- Very time-consuming to update or modify

The Solution

A set of new VICIdial settings and features to allow a web-access-only administrator the ability to set up a limited live-call-only data sharing function for live transfers of calls.

The Details

- 1) Set up an IAX carrier on the "fronter" cluster with a Dialplan Entry that will send calls to that carrier
- 2) Set up a matching IAX phone account on the "verification" cluster with "trunkinbound" as contexts
- 3) An API user is set up on the "fronter" cluster with the "ccc_lead_info" API function enabled
- 4) Set "fronter" Campaign to use a Transfer Preset
- 5) DID, Call Menu, In-Group and Settings Container entries are set up on the "verification" cluster that include the new "cm_sc_ccc_lookup_insert.agi" script

IAX Carrier on "Fronter" Cluster

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Show Carriers | Add A New Carrier | Copy A Carrier

ADMINISTRATION

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- Campaigns
- Lists
- Quality Control
- Scripts
- Filters
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- Remote Agents
- Admin**
 - Call Times
 - Shifts
 - Phones
 - Templates
 - Carriers**
 - Servers
 - Conferences
 - System Settings
 - Screen Labels
 - Screen Colors
 - System Statuses
 - Status Groups
 - CID Groups

MODIFY A CARRIER RECORD: ccctest

Carrier ID: **ccctest**

Carrier Name: ?

Carrier Description: ?

Admin User Group: ?

Registration String: ?

Template ID: ?

Account Entry:

```
[ccctest]
accountcode=ccctest
secret=a897s9dfasd4as4a2f435
type=friend
requirecalltoken=no
context=trunkinbound
auth=plaintext
host=dynamic
permit=0.0.0.0/0.0.0.0
disallow=all
```

 ?

Protocol: ?

Globals String: ?

Dialplan Entry:

```
IAX devserver cpdtest trunk
exten => _741NXXNXXXXXX,1,AGI(agi://127.0.0.1:4577/call_log)
exten => _741NXXNXXXXXX,2,Dial(${TRUNKccctest}/${EXTEN:3},,tTo)
exten => _741NXXNXXXXXX,3,Hangup
```

 ?

Server IP: (0.0.0.0 is all servers) ?

Active: ?

IAX Phone on "Verification" Cluster

[HOME](#) | [Timeclock](#) | [Chat](#) | [Logout \(7777\)](#) | [Change language](#)
Sunday October 7, 2018 9:34:36 AM

[Show Phones](#) | [Add A New Phone](#) | [Phone Alias List](#) | [Add A New Phone Alias](#) | [Group Alias List](#) | [Add A New Group Alias](#)

VICihost

ADMINISTRATION

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MODIFY A PHONE RECORD: 8300

Phone Extension:	<input type="text" value="ccctest"/>	?
Dial Plan Number:	<input type="text" value="8300"/>	(digits only) ?
Voicemail Box:	<input type="text" value="8300"/>	(digits only) ?
Outbound CallerID:	<input type="text"/>	(digits only) ?
Outbound Alt CallerID:	<input type="text"/>	optional (digits only) ?
Admin User Group:	<input type="text" value="---ALL---"/>	?
Phone IP address:	<input type="text"/>	(optional) ?
Computer IP address:	<input type="text"/>	(optional) ?
Server IP:	<input type="text" value="192.168.201.115"/>	?
Agent Screen Login:	<input type="text" value="ccctest"/>	?
Login Password:	<input type="text" value="test1"/>	?
Registration Password:	<input type="text" value="a897s9dfasd4as4a2f435"/>	? Strength: + Strong
Set As Webphone:	<input type="text" value="N"/>	?
Webphone Dialpad:	<input type="text" value="Y"/>	?
Webphone Auto-Answer:	<input type="text" value="Y"/>	?
Webphone Dialbox:	<input type="text" value="Y"/>	?
Webphone Mute:	<input type="text" value="Y"/>	?
Webphone Volume:	<input type="text" value="Y"/>	?

IMPORTANT: this phone entry must have the Outbound CallerID and Fullname fields blank, and the Phone Type must have "trunk" in it. It also needs to use "trunkinbound" as it's phone context and exten context

API User Added on "Fronter" Cluster

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User Stats | User Status | Time Sheet | Days Status

VICIdial

ADMINISTRATION

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 - Add A New User
 - Copy User
 - Search For A User
 - User Stats
 - User Status
 - Time Sheet
 - User Territories
 - Overall New Lead Limits
- Campaigns
- Lists

MODIFY A USERS RECORD: apiccc

User Number: **apiccc** ?

PASSWORD IS ENCRYPTED, ONLY ENTER IN A PASSWORD BELOW IF YOU WANT TO CHANGE IT!

Password: ? Strength: Weak

Force Change Password: ?

Last Login Info: **2018-09-23 20:31:59 - 0 - 173.241.198.163** ?

Full Name: ?

User Level: ?

User Group: ?

Phone Login: ?

Phone Pass: ?

Active: ?

Voicemail ID: ?

SECURITY OPTIONS, Only enable if needed:

Modify IP Lists: ?

Ignore IP List: ?

API USER OPTIONS, Only enable if needed:

Agent API Access: ?

API List Restrict: ?

API Allowed Functions: ?

DISABLE ADMIN AND AGENT SCREEN OPTIONS:

API Only User: ?

LEVEL 9 ADMIN OPTIONS:

Modify Same User Level: ?

Alter Admin Interface Options: ?

Set “Fronter” Campaign Transfer Preset

Transfer-Conf DTMF 1:	<input type="text"/>	?
Transfer-Conf Number 1:	9995554444	?
Transfer-Conf DTMF 2:	<input type="text"/>	?
Transfer-Conf Number 2:	<input type="text"/>	?
Transfer-Conf Number 3:	<input type="text"/>	?
Transfer-Conf Number 4:	<input type="text"/>	?
Transfer-Conf Number 5:	<input type="text"/>	?
Enable Transfer Presets:	ENABLED ▾	?
Hide Transfer Number to Dial:	disabled ▾	?
PrePopulate Transfer Preset:	PRESET_1 ▾	?
Quick Transfer Button:	PRESET_1 ▾	?
Custom 3-Way Button Transfer:	PRESET_1	
3-Way Call Outbound CallerID:	CAMPAIGN ▾	?
3-Way Call Dial Prefix:	74	?
3-Way Volume Buttons:	ENABLED ▾	?
Customer 3-Way Menu:		

Xfer-Conf DTMF [X]

These fields allow for you to have two sets of Transfer Conference and DTMF presets. When the call or campaign is loaded, the agent screen will show two buttons on the transfer-conference frame and auto-populate the number-to-dial and the send-dtmf fields when pressed. If you want to allow Consultative Transfers, a fronter to a closer, have the agent use the CONSULTATIVE checkbox, which does not work for third party non-agent consultative calls. For those just have the agent click the Dial With Customer button. Then the agent can just LEAVE-3WAY-CALL and move on to their next call. If you want to allow Blind transfers of customers to an AGI script for logging or an IVR, then place AXFER in the number-to-dial field. You can also specify a custom extension after the AXFER, for instance if you want to do a call to a special IVR you have set to extension 83900 you would put AXFER83900 in the number-to-dial field.

Settings Container on "Verification" Cluster

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Settings Containers | Add A Settings Container

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MODIFY SETTINGS CONTAINER: ccc_test

Container ID: **ccc_test**

Container Notes: ?

Container Type: v

Admin User Group: v ?

Container Entry:

```
http://10.10.10.15/vicidial/non_agent_api.php?user=apiccc&pass=apiccctest&source=ccctest&function=ccc_lead_info&call_id--A--call_id--B--
```

In-Group Entry on "Verification" Cluster

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ADMINISTRATION

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- Scripts
- Filters
- Inbound**
 - Show In-Groups
 - Add A New In-Group
 - Copy In-Group
 - Show Email Groups
 - Add New Email Group
 - Copy Email Group
 - Show Chat Groups
 - Add New Chat Group
 - Copy Chat Group
 - Show DIDs
 - Add A New DID
 - Copy DID
 - RA Extensions
 - Show Call Menus
 - Add A New Call Menu

MODIFY A GROUPS RECORD: TEST_INBOUND_DEV

Group ID: **TEST_INBOUND_DEV** ?

Group Name: ?

Group Color: ?

Active: ?

In-Group Calldate: 2018-10-03 18:20:10 ?

8 Day inbound call count for this in-group [more summary stats...](#) ?

2018-10-07	-none-								
2018-10-06	-none-								
2018-10-05	-none-								
2018-10-04	-none-								
2018-10-03	-none-								1
2018-10-02	-none-								
2018-10-01	-none-								
2018-09-30	-none-								

Admin User Group: ?

Park Music-on-Hold: ?

Web Form: ?

Web Form Two: ?

Next Agent Call: ?

Queue Priority: ?

On-Hook Ring Time: ?

On-Hook CID: ?

On-Hook CID Number: ?

Frontier Display: ?

Script: ?

Call Menu Entry on "Verification" Cluster



ADMINISTRATION

Reports

Users

Campaigns

Lists

Scripts

Filters

Inbound

Show In-Groups

Add A New In-Group

Copy In-Group

Show Email Groups

Add New Email Group

Copy Email Group

Show Chat Groups

Add New Chat Group

Copy Chat Group

Show DIDs

Add A New DID

Copy DID

RA Extensions

Show Call Menus

Add A New Call Menu

MODIFY A CALL MENU RECORD: cross_cluster_communication_test_insert

Menu ID:	cross_cluster_communication_test_insert ?
Menu Name:	Cross Cluster Communication lead search ins? ?
Admin User Group:	---ALL--- ?
Menu Prompt:	wait-moment cm_sc_ccc_lookup_insert.agi,ccc_test---8199 audio chooser ?
Menu Timeout:	10 ?
Menu Timeout Prompt:	NONE audio chooser ?
Menu Invalid Prompt:	NONE audio chooser ?
Menu Repeat:	0 ?
Menu Time Check:	0 - No Time Check ?
Call Time:	24hours - default 24 hours calling ? Holidays defined for this call time: 0
Track Calls in Real-Time Report:	1 - Realtime Tracking ?
Tracking Group:	CALLMENU ?
Log Key Press:	0 - No DTMF Logging ? Log Field: NONE ?

SUBMIT

Call Menu Options:

Option:	A ?	Description:		Route:	INGROUP ?
In-Group:	TEST_INBOUND_DEV ?	Handle Method:	CLOSER ?		
Search Method:	LB ?	List ID:	998		
Campaign ID:	TESTCAMP ?	Phone Code:	1		
VID Enter Filename:		audio chooser			
VID ID Number Filename:		audio chooser			
VID Confirm Filename:		audio chooser	VID Digits:		

DID Entry on "Verification" Cluster

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ADMINISTRATION

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- Show In-Groups
- Add A New In-Group
- Copy In-Group
- Show Email Groups
- Add New Email Group
- Copy Email Group
- Show Chat Groups
- Add New Chat Group
- Copy Chat Group
- Show DIDs
- Add A New DID
- Copy DID

MODIFY A DID RECORD: 9995554444

DID Extension:	9995554444 ?
DID Description:	Cross-cluster-communication lead inbound ?
DID Carrier Description:	?
Active:	Y ?
Admin User Group:	---ALL---
DID Route:	CALLMENU ?
Record Call:	N ?
Extension:	9998811112 ?
Extension Context:	default ?
Voicemail Box:	voicemail chooser ?
Phone Extension:	?
Server IP:	?
Call Menu:	cross_cluster_communication_test_insert ?

The Results

A client with one verification cluster supporting over 300 agents receiving calls from six separate frontier clusters with over 1,200 total agents. The whole system is capable of placing and receiving over 3 million calls per day, with up to 500,000 calls being transferred over these “CCC” transfer lines. They can add new frontier clusters as needed without the need for any custom programming or command-prompt level access.

For more details, see the `CROSS_CLUSTER_COMMUNICATION.txt` document.

Additional CCC Features:

- Detailed logging to show both the origination and destination Call IDs and Lead IDs
- API function from the destination cluster to allow forcing a “Leave 3-Way Call” action on the frontier cluster VICIdial agent’s session

Other new features added in the last year:

- GDPR Features
- Inbound preserve place-in-line
- Inbound Closing Time
- State and Areacode shared CallerID Groups
- Real-Time Whiteboard
- Waiting Call On/Off URL
- New admin HELP bubbles
- DNC.COM inbound number filtering
- Inbound No-Agents No-Dial Campaign setting
- Manager-approved Pause Codes
- SWITCH custom field type
- Scheduled callbacks enhancements
- And much more!

GDPR Features

The new EU data protection law.
It's complicated...

New GDPR features include:

- The ability to download all customer and contact log data and call recordings for a lead
- The ability to delete all of the “personal data” from those records for a specific lead.

Inbound preserve place-in-line

- Offered as Hold-time and Wait-time options to customers while they are waiting for an agent in an In-Group queue
- Offers the ability for the customer to enter a different phone number to be called back at
- When customer's place-in-line is reached, the next available agent's screen automatically places a "Dial In-Group" call to the customer, which is logged as an inbound call for that In-Group

Inbound Closing Time

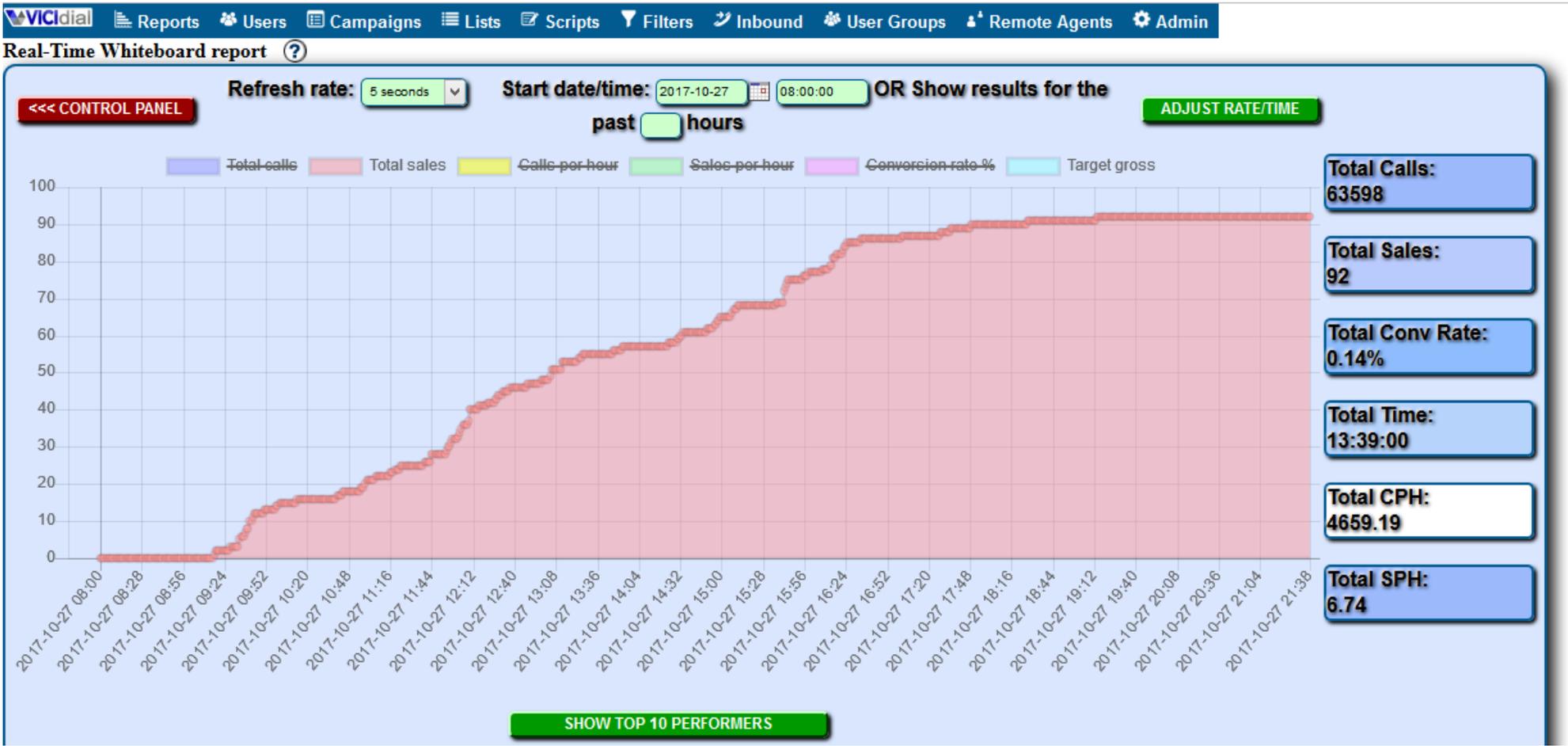
This feature was created so that customers would no longer be left in queue all night after closing time of the queue when agents were no longer taking calls for the day. It allows you to choose what happens to those calls at a specified closing time, such as allowing the customer to leave a voicemail.

State and Areacode shared CallerID Groups

- Outbound CallerID numbers can be defined based on the state or areacode of the customer that is being called
- More than one CallerID number can be used for a single state or areacode, they will be used in round-robin order as calls are placed to numbers within that areacode
- Allows for the same group of per-state or per-areacode CallerID numbers to be used across multiple campaigns
- New Admin utilities to maintain those CID Groups:
 - Bulk Add
 - Bulk Delete

Real-Time Whiteboard

A ticker-style report that constantly updates showing metrics for the selected campaigns



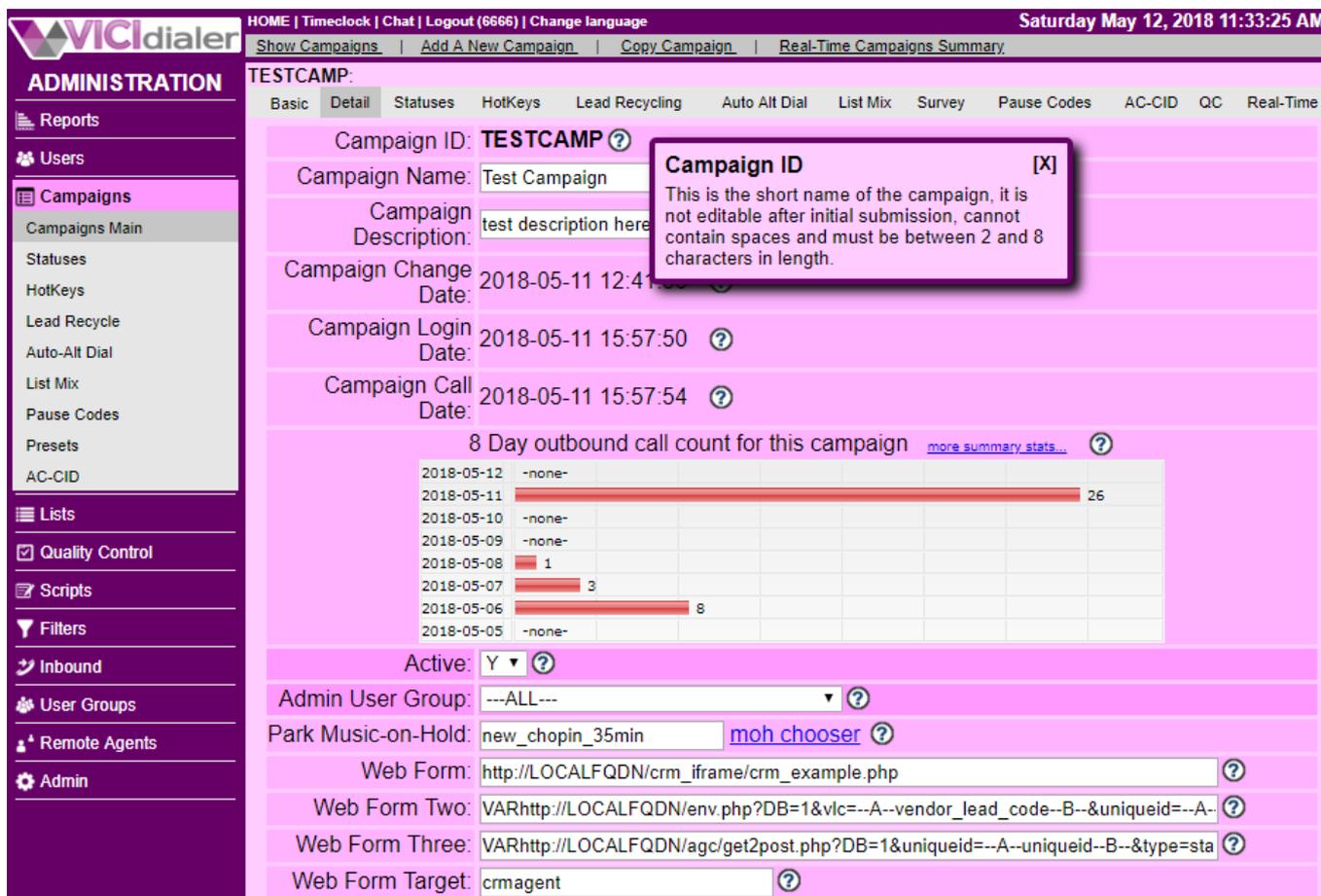
Waiting Call On/Off URL

- Turn lights on and off in a call center when there are calls in queue
- Works for one or several specified In-Groups for each outlet
- Requires network-enabled power switch.



Re-wrote Web-Admin “HELP”

Web-admin HELP now uses popup bubbles instead of a popup browser with all help text in it.



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Show Campaigns | Add A New Campaign | Copy Campaign | Real-Time Campaigns Summary

TESTCAMP:

Basic | Detail | Statuses | HotKeys | Lead Recycling | Auto Alt Dial | List Mix | Survey | Pause Codes | AC-CID | QC | Real-Time

Campaign ID: **TESTCAMP** ?

Campaign Name: Test Campaign

Campaign Description: test description here

Campaign Change Date: 2018-05-11 12:41:00 ?

Campaign Login Date: 2018-05-11 15:57:50 ?

Campaign Call Date: 2018-05-11 15:57:54 ?

8 Day outbound call count for this campaign [more summary stats...](#) ?

2018-05-12	-none-	
2018-05-11		26
2018-05-10	-none-	
2018-05-09	-none-	
2018-05-08	1	
2018-05-07	3	
2018-05-06	8	
2018-05-05	-none-	

Active: Y ?

Admin User Group: ---ALL---

Park Music-on-Hold: new_chopin_35min [moh chooser](#) ?

Web Form: ?

Web Form Two: ?

Web Form Three: ?

Web Form Target: ?

Campaign ID [X]

This is the short name of the campaign, it is not editable after initial submission, cannot contain spaces and must be between 2 and 8 characters in length.

DNC.COM Inbound Number Filtering

- Adds ability to filter inbound calls based upon the phone number of the caller matching to a DNC.com list, like their “frequent litigator list”
- Filtering can be set up system-wide and/or per each DID

Inbound No-Agents No-Dial

- An outbound dialing campaign setting
- Checks if any agents from selected In-Groups are ready and waiting for inbound phone calls before allowing outbound auto-dialing calls to be placed on the campaign

Manager-approved Pause Codes

Requires agents to get manager approval on their workstation to use specific pause codes

SELECT A PAUSE CODE :

PAUSE CODE

BREAK - Break time	LUNCH - Lunch Time
COACH - Coaching *	TOILET - bathroom break
	TRAIN - Training

* These pause codes require manager approval

SWITCH custom field type

Allows you to put buttons on the agent FORM to allow for the custom fields form to be switched while on an active call.

Logged in as User: 6666 on Phone: Local/8300@default6666 to campaign: TESTCAMP

2018-05-07 02:58:43 session ID: 8800051
 Calls in Queue: 0 Emails in Queue: 0

GROUPS LOGOUT

CALL HUNGUP

STATUS: Called: 999-903-0023 UID: M5070258340000825220 List: 107 seconds: 9 [reset form](#)

LEAD PREVIEW

 ALT PHONE DIAL

[Next Call Pause](#)

 RECORDING FILE:

 M5070258340000825220

 RECORD ID: 200584

Switch Form

test select list asdff [help+](#)

test date select 2018-05-08 [help+](#) test time 04 58 [help+](#) End Time 02 58 [help+](#) Followup

Time 02 58 [help+](#) Followup TimeX 02 58 [help+](#)

multi test

- multi select name 1
- multi select name 2
- multi select name 3
- multi select name 4

[help+](#)

radio test [help+](#)

- multi select name 1
- multi select name 2
- multi select name 3
- multi select name 4
- multi select name 5

checkbox test [help+](#)

multi select name 1 multi select name 2 multi select name 3 multi select name 4 [help+](#) test text input

area test

VERSION: 2.14-584c BUILD: 180508-2222 Server: 192.168.198.8

[Show conference call channel information](#) **5 ACTIVE CALLBACKS** [Hide Calls In Queue](#) **HOT KEYS INACTIVE** **MUTE** [Agents View +](#)

PHONE	FULL NAME	WAIT	AGENT	CALL GROUP	TYPE

Scheduled callbacks new features

- Added automatic rescheduling of ANYONE callbacks
- Forced dialing of USERONLY callbacks
- Customer Timezone scheduling of callbacks

Scheduled Callbacks Auto Reschedule: DAY_1

Drop Call Seconds: 10

Drop Action: IN_GROUP

Safe Harbor Exten: 8307

Safe Harbor Audio: buzz|ding

Safe Harbor Audio Field: disabled

Safe Harbor Call Menu: test_menu

Voicemail: 1234

Drop Transfer Group: TEST_IN3 - TEST

Disable Dispo: DISPO_ENABLED

Scheduled Callbacks Auto Reschedule [X]

This feature only affects ANYONE scheduled callbacks. If DAY_1 is used, it will automatically reschedule lead lead to be called back on the next calling day at the same time they were called if the resulting disposition of the call was not a Human Answer -Y- status. The next calling day is determined by the Call Time that is set for the campaign. In the case of DAY_1, if tomorrow is not an allowed calling day, the system will look at the next day and then the next day until it finds the next allowable calling day to set the ANYONE scheduled callback for. There are up to 6 DAY options, then there are up to 3 WEEK options, then there are up to 6 MONTH options. Default is DISABLED.

Select a Callback Date: 2018-08-27 Hour: 12 Minutes: 00 Cusl

MY CALLBACK ONLY

CB Comments:

Comments:

SUBMIT

August 2018							September 2018							October																							
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun																	
		1	2	3	4		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
27	28	29	30	31			27	28	29	30	31			27	28	29	30	31																			

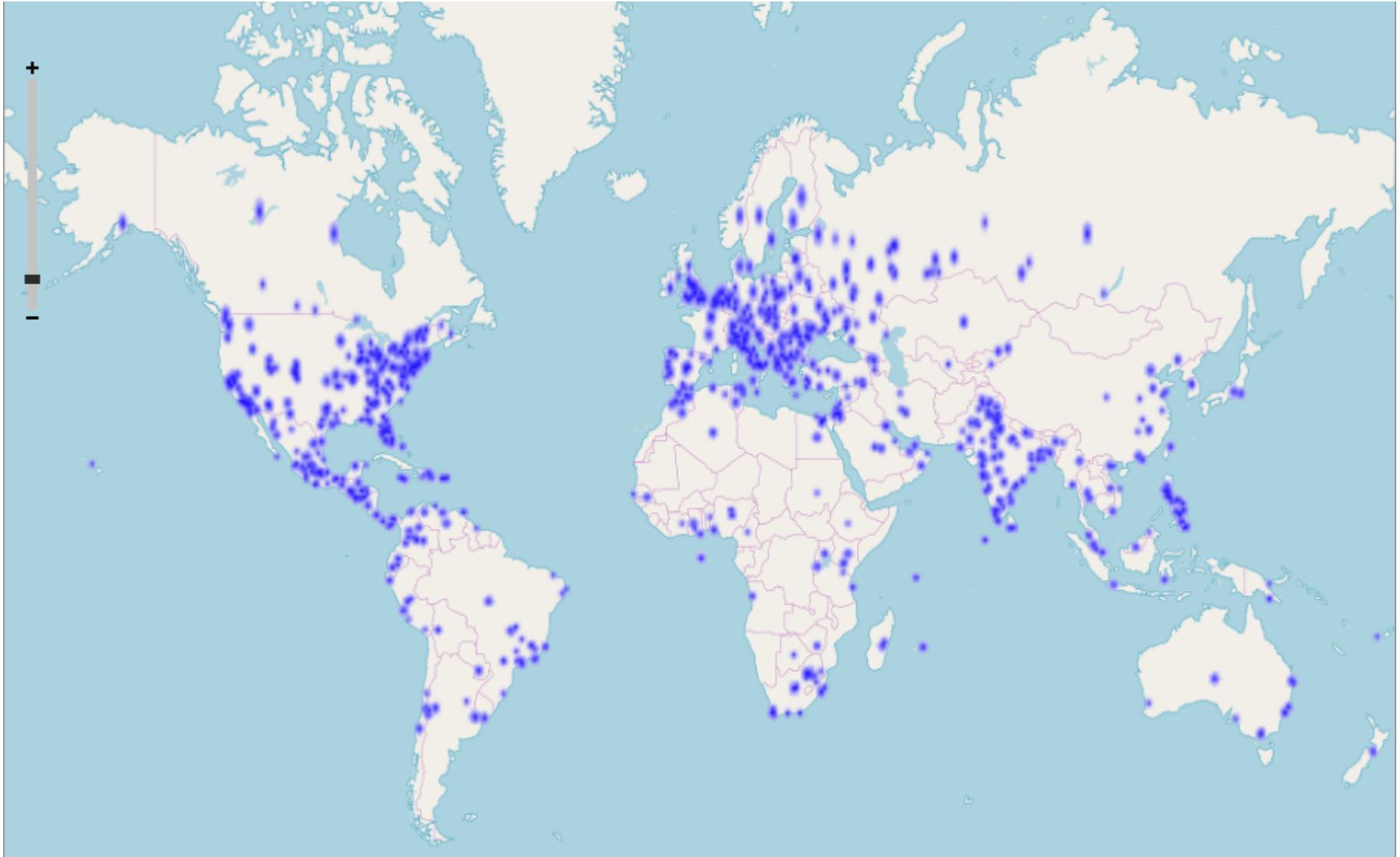
Select a Customer Timezone:

SERVER TIME:	2018-08-27 14:39:43
LEAD TIME:	2018-08-28 06:39:43 (-16 hours difference)
Atlantic US Time Zone:	2018-08-27 14:39:43 (0 hours difference)
Eastern US Time Zone:	2018-08-27 14:39:43 (0 hours difference)
Central US Time Zone:	2018-08-27 13:39:43 (1 hours difference)
Mountain US Time Zone:	2018-08-27 12:39:43 (2 hours difference)
Arizona US Time Zone:	2018-08-27 11:39:43 (3 hours difference)
Pacific US Time Zone:	2018-08-27 11:39:43 (3 hours difference)
Alaska US Time Zone:	2018-08-27 10:39:43 (4 hours difference)
Hawaii US Time Zone:	2018-08-27 08:39:43 (6 hours difference)
Canada Newfoundland Time Zone:	2018-08-27 16:09:43 (-1.5 hours difference)
Canada Atlantic Time Zone:	2018-08-27 15:39:43 (-1 hours difference)
Canada Saskatchewan Time Zone:	2018-08-27 12:39:43 (2 hours difference)
Eastern Australia Time Zone:	2018-08-28 04:39:43 (-14 hours difference)
Queensland Australia Time Zone:	2018-08-28 04:39:43 (-14 hours difference)
Central Australia Time Zone:	2018-08-28 04:09:43 (-13.5 hours difference)
Northern Territory Australia Time Zone:	2018-08-28 04:09:43 (-13.5 hours difference)
Western Australia Time Zone:	2018-08-28 02:39:43 (-12 hours difference)

In other news...

Asterisk 13 is in wide use, now on hundreds of our VICIhost hosted dialers, has resulted in 20-30% increase in capacity per server, more stable than previous versions

Over 11,000 New VICdial Installs in the last year!



VICdial installs run from 11,885 unique IP addresses from September 28, 2017 to September 28, 2018

Thank you!

For more information, go to:

www.vicidial.org

www.vicidial.com