

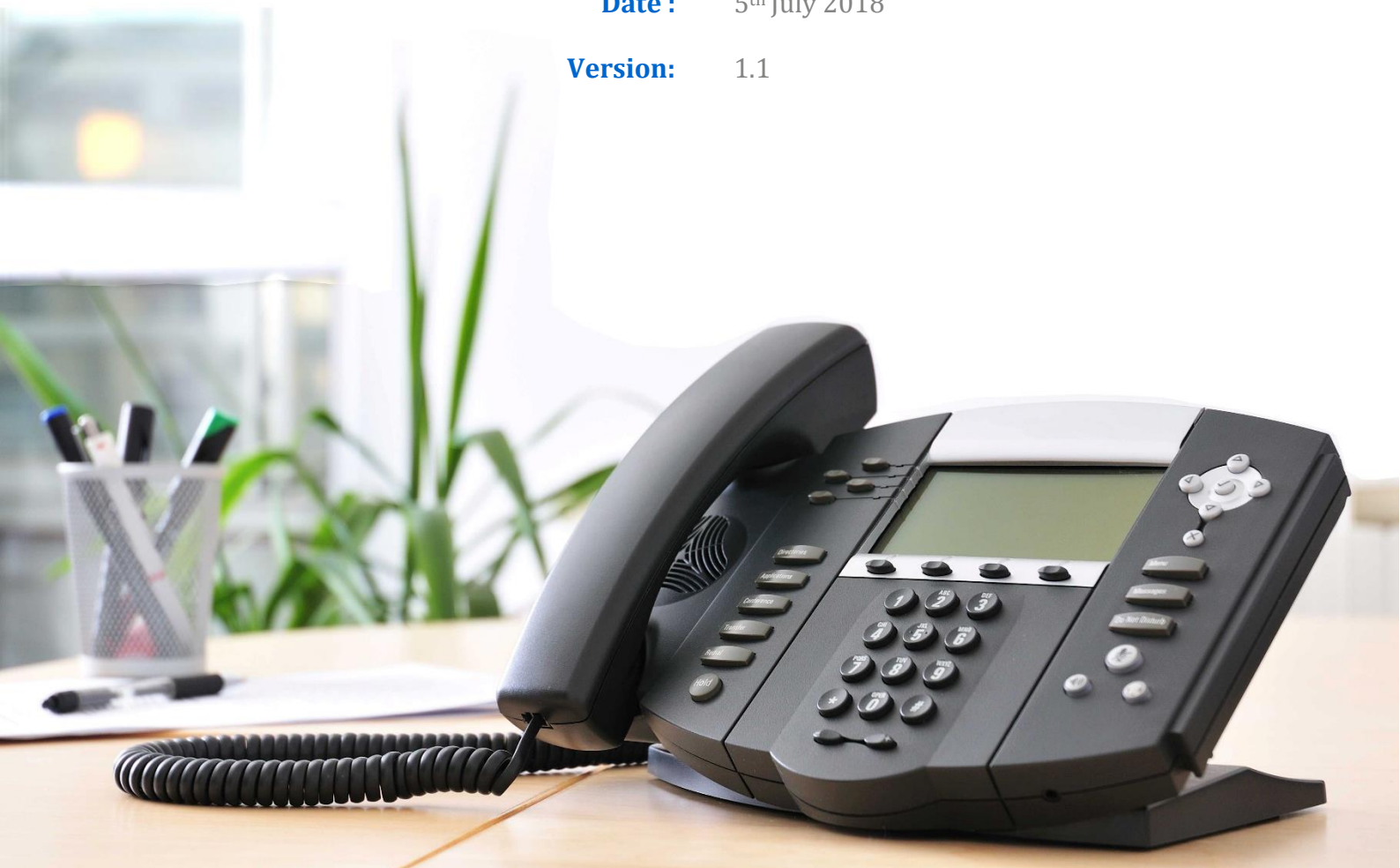
Mr. VoIP Universal Tools

Documentation

Prepared by : RT

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Version: 1.1



This document introduces that **Mr. VoIP** is a Universal Tool that can control calls and reports programmatically. This is an advanced Tool that developed based on .NET, C# Windows/Wed based platform.

- ✓ No Need to Modify the Firewall
- ✓ Uses Transaction Queues
- ✓ Secure Communications
- ✓ Scalable Infrastructure
- ✓ World-wide Architecture

Whether through one of our commercial products, or a custom solution built to meet your specific needs, we can help you get the most out of your 3CX investment.

“**Get the best solution for your Business**”

- **Mr. VoIP Tools** is only available on the server, i.e. any application that is using it must be running on the server itself. This is because the service will not accept connections from 0.0.0.0 (ANY IP). Connections are only accepted from 127.0.0.1 (localhost).
- Mr. VoIP Tools is only available in commercial editions.

We provide solutions with a seamless and omnipresent connectivity which is essential to help your business achieve its goals and to get closer to your customers.

We can help your business with the best of solutions, in getting the most out of your 3CX investment, whether it is a commercial product or a customized solution to meet specific needs. We will assist you in acquiring the best solutions for your business.

Mr. VoIP Tools standard edition and customization modules has briefs as follows:

“**24x7 SUPPORT AND MAINTENANCE!**”

Are you looking for custom solutions for all your business technology needs?

We provide solutions with a seamless and omnipresent connectivity which is essential to help your business achieve its goals and to get closer to your customers.

We can help your business with the best of solutions, in getting the most out of your 3CX investment, whether it is a commercial product or a customized solution to meet specific needs. We will assist you in acquiring the best solutions for your business.

OVERALL STRUCTURE





Add, Edit, Delete Extension via HTTP API

MRVOIP platform provides reliable Add, Edit, Delete account via HTTP API functions to help your organisation add, edit, delete extensions with just one touch. Forget about doing multiple updates on CRM, telephone directory and your PBX.

With MRVOIP Add, Edit, Delete account via HTTP API feature, you can be rest assured that our innovative ways of updating your data throughout the platforms becomes a seamless experience and maintained at the highest level of security.

This powerful feature gives users programmatic experience to access our services making use of resource-based URLs, status codes, methods (POST, DELETE, etc.), and JSON for requests and responses. This makes it easy to use HTTP clients in your backend for powerful API interaction.

MRVOIP can dive straight into creating and updating data via HTTP API and help to analyse which routes supports creation and update methods ensuring that information is fully updated across the board. Our 3CX HTTP API allows you to add, edit and delete accounts of your 3CX clients. You can create and edit extensions on our console and send manual links, client-provisioning configuration file, and voice mail secret number. You can use a softphone to alter auto-generated authentication credentials and keep your customer records up-to-date.

Our solution allows you customize each user account so that you are able to meet unique needs of your 3CX clients. If you are looking for an effective web conferencing solution, you can specify a meeting room name so that your partners can have a personalized inbound call or a 3CX web meeting. It's simple, effective and certainly less time-consuming than most other solutions in the marketplace.

This is introducing to Develop Mr. VoIP Universal Tool to Add / Update / Delete **Extension** and **Contacts** through HTTP API with Security Key.

- Uses predictable, resource-oriented URLs.
- Uses built-in HTTP capabilities for passing parameters and authentication.
- Responds with standard HTTP response codes to indicate errors.
- POST JSON Object/Array.

The HTTP API gives you programmatic access to our services. We try our best to be RESTful, making use of resource-based URLs, status codes, methods (POST, DELETE, etc.), and JSON for requests and responses. This makes it easy to use HTTP clients in your backend for powerful API interaction.

Use the HTTP API to send data directly from endpoint to 3cx server. In the examples the parameters are highlighted purple. The values in yellow are what you need to replace with the parameters you are specifically interested in. Talk to us today to find out more.

Add/Edit/Delete Extension or Contact through HTTP API

Action	Description
Title	Call Control Manager API
Base URL	https://x5.1xx.xxx.x4:8000/api.aspx
Method	POST
URL Parameter	qsSecuritykey=25sdfs482s4Rsd fasxt45wersf
	qsValue= Json Array
Json Array (Request Format)	<pre>{ "mExtension": [{"FirstName": "xxxx", "LastName": "xxxx", "PhoneNumber": "xxxx", "CompanyName": "xxxxxx"}] }</pre>
Success Response Format	<pre>{"status": "Extension Created", "errorMessage": "", "errorCode": ""}</pre>
Error Response Format	<pre>{"message": "Authentication Token invalid", "errorCode": "INVALID_AUTH_ID"}</pre>

Post Request Format:

Send to POST url (<https://x5.1xx.xxx.x4:8000/api.aspx?action=addExt&qstype=1&qsValue={.....} &qsSecuritykey=25sdfs482s4Rsd fasxt45wersf>) with two request parameters:

Argument	Description
qsValue	Either a single JSON event object or an array of JSON objects, each of which represents one event.
qsSecuritykey	If Security key value matched with your external application. The POST method with proceed for request.

Add Single Extension

To Add Single Extension into 3CX Management Console

Property	Description
ExtentionNumber	The unique Extension number (Required)
EmailAddress	Email Address of the user (Optional)
FirstName	First name of the user (Required)
LastName	Last Name of the user (Optional)
OutboundCallerID	Outbound Caller ID of the user (Optional)

HTTP POST URL (Request Format):

<https://x5.1xx.xxx.x4:8000/api.aspx?action=addExt&qstype=1&qsSecuritykey=25sdfs482s4Rsdfasxt45wersf&qsValue=>

```
{
  "sExtension":
  [ {"ExtentionNumber": "xxxx", "EmailAddress": "", "FirstName": " xxxx ", "LastName": "", "OutboundCallerID": ""} ]
}
```

Response Format:

If Success – {“status”: “Extension Created”, “errorMessage”: “”, “errorCode”: “”}

If Fails – {“message”: “Authentication Token invalid”, “errorCode”: “INVALID_AUTH_ID”}

{“message”: “Internal Server error”, “errorCode”: “500”}

{“message”: “Exception Detail”, “errorCode”: “WEBSERVICE_ERROR”}

Add Multiple Extension

To Add Multiple Extension, we can use Json array as follows.

Property	Description
ExtentionNumber	The unique Extension number (Required)
EmailAddress	Email Address of the user (Optional)
FirstName	First name of the user (Required)
LastName	Last Name of the user (Optional)
OutboundCallerID	Outbound Caller ID of the user (Optional)

HTTP POST URL (Request Format):

<https://x5.1xx.xxx.x4:8000/api.aspx?action=addExt&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf&qsvValue=>

```
{
  "mExtension":
  [ {"ExtentionNumber": "xxxx", "EmailAddress": "", "FirstName": " xxxx ", "LastName": "", "OutboundCallerID":
    ""}, {"ExtentionNumber": "xxxx", "EmailAddress": "", "FirstName": " xxxx ", "LastName": "",
    "OutboundCallerID": ""}
  ]
}
```

Response Format:

If Success – {"status": "All Extension Created", "errorMessage": "", "errorCode": ""}

If Fails – {"message": "Authentication Token invalid", "errorCode": "INVALID_AUTH_ID"}

```
{“message”:”Internal Server error”, “errorCode”:”500”}
```

```
{"message": "Exception Detail", "errorCode": " WEBSERVICE_ERROR "}
```


Delete Extension

To Delete an Extension

Property	Description
ExtentionNumber	The unique Extension number (Required)

HTTP POST URL (Request Format):

<https://x5.1xx.xxx.x4:8000/api.aspx?action=deleteExt&qstype=1&qsSecuritykey=25sdfs482s4Rsdfasxt45wersf&qsValue=>

```
{  
  "dExtension":  
    [ {"ExtentionNumber": "xxxx"}  
    ]  
}
```

Response Format:

If Success – {“status”:“Extension Deleted”, “errorMessage”:”, “errorCode”:””}

If Fails – {“message”:“Authentication Token invalid”, “errorCode”:“INVALID_AUTH_ID”}

{“message”:“Internal Server error”, “errorCode”:“500”}

{“message”:“* Exception Detail”, “errorCode”:“ WEBSERVICE_ERROR “}

*Note: Exception Detail response error like (e.g: Extension number does not exit).

Update Extension

To Update the information for the specific Extension. Note: Extension number is a fixed value and it cannot be changed.

Property	Description
ExtentionNumber	The unique Extension number (Required)
EmailAddress	Email Address of the user (Optional)
FirstName	First name of the user (Required)
LastName	Last Name of the user (Optional)
OutboundCallerID	Outbound Caller ID of the user (Optional)

HTTP POST URL (Request Format):

<https://x5.1xx.xxx.x4:8000/api.aspx?action=updateExt&qstype=1&qsecuritykey=25sdfs482s4Rsdxfasxt45wersf&qvalue=>

```
{
  "uExtension":
  [ {"ExtentionNumber": "xxxx", "EmailAddress": "", "FirstName": " xxxx ", "LastName": "", "OutboundCallerID":
    ""}
  ]
}
```

Response Format:

If Success – {"status": "Extension Updated", "errorMessage": "", "errorCode": ""}

If Fails – {"message": "Authentication Token invalid", "errorCode": "INVALID_AUTH_ID"}

{"message": "Internal Server error", "errorCode": "500"}

{"message": "Exception Detail", "errorCode": "WEBSERVICE_ERROR"}

Add new Contact

To Add Single Contact

Property	Description
FirstName	First Name of the contact person (Required)
LastName	Last Name of the contact person (Required)
PhoneNumber	Phone Number of the contact person (Required)
CompanyName	Company Name of the contact person

HTTP POST URL (Request Format):

<https://x5.1xx.xxx.x4:8000/api.aspx?action=addPhonebook&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf&qvalue=>

```
{  
  "sContact":  
  [ {"FirstName": "xxxxx", "LastName": "xxxx", "PhoneNumber": "xxxx", "CompanyName": ""}  
  ]  
}
```

Response Format:

If Success – {“status”:“Contact Created”, “errorMessage”:“”, “errorCode”:“”}

If Fails – {“message”:“Authentication Token invalid”, “errorCode”:“INVALID_AUTH_ID”}

{“message”:“Internal Server error”, “errorCode”:“500”}

{“message”:“Exception Detail”, “errorCode”:“ WEBSERVICE_ERROR “}

Update Contact

Top Update Contact list person

Property	Description
FirstName	First Name of the contact person (Required)
LastName	Last Name of the contact person (Required)
PhoneNumber	Phone Number of the contact person (Required)
CompanyName	Company Name of the contact person
Registered PhoneNumber	Specific contact person Phone Number of the contact person (Required)

HTTP POST URL (Request Format):

[https://x5.1xx.xxx.x4:8000/api.aspx?action=updatePhonebook&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf &qsetValue=](https://x5.1xx.xxx.x4:8000/api.aspx?action=updatePhonebook&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf&qsetValue=)

```
{
  "uContact":
  [ {"FirstName": "xxxx", "LastName": "xxxx", "PhoneNumber": "xxxx", "CompanyName": "",
    "RegisteredPhoneNumber": "xxxx"}
  ]
}
```

Response Format:

If Success – {"status": "Contact Updated", "errorMessage": "", "errorCode": ""}

If Fails – {"message": "Authentication Token invalid", "errorCode": "INVALID_AUTH_ID"}

{"message": "Internal Server error", "errorCode": "500"}

{"message": "Exception Detail", "errorCode": "WEBSERVICE_ERROR"}

Delete Contact

To delete a person from the contact list

Property	Description
PhoneNumber	Phone Number of the contact person to delete the record (Required)

HTTP POST URL (Request Format):

[https://x5.1xx.xxx.x4:8000/api.aspx?action=deletePhonebook&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf &qvalue=](https://x5.1xx.xxx.x4:8000/api.aspx?action=deletePhonebook&qstype=1&qsecuritykey=25sdfs482s4Rsdfasxt45wersf&qvalue=)

```
{
  "dContact":
  [ {"PhoneNumber": "xxxx"}
  ]
}
```

Response Format:

If Success – {“status”:“Contact Deleted”, “errorMessage”:”, “errorCode”:””}

If Fails – {“message”:“Authentication Token invalid”, “errorCode”:“INVALID_AUTH_ID”}

{“message”:“Internal Server error”, “errorCode”:“500”}

{“message”:“Exception Detail”, “errorCode”:“WEBSERVICE_ERROR”}

Error Handling list:

– If Authentication token invalid:

{“message”:“Authentication Token invalid”, “errorCode”:“INVALID_AUTH_ID”}

– If Authentication token expired:

{“message”:“ Authentication Token expired”, “errorCode”:“AUTH_ID_EXPIRED”}

– On Add Single Extension:

{“message”:“Invalid Extension number”, “errorCode”:“INVALID_EXTENSION”}

Note: If enter any empty value or illegal value(string)

{“message”:“Extension number already exist”, “errorCode”:“EXTENSION_EXIST”}

```
{"message": "Invalid Email Address", "errorCode": "INVALID_EMAIL"}
```

Note: Validate the global email format and this field is not a mandatory one

```
{"message": "Invalid First name", "errorCode": "FNAME_INVALID"}
```

Note: If enter any empty values as First name

– On Delete Extension

```
{"message": "Invalid Extension number", "errorCode": "INVALID_EXTENSION"}
```

Note: If enter any empty values or extension not found

– On Update Extension

```
{"message": "Invalid Extension number", "errorCode": "INVALID_EXTENSION"}
```

Note: If enter any empty values or extension not found

```
{"message": "Invalid Email Address", "errorCode": "INVALID_EMAIL"}
```

Note: Validate the global email format and this field is not a mandatory one

– On Add New Contact

```
{"message": "Invalid First name", "errorCode": "FNAME_INVALID"}
```

Note: If enter any empty values

```
{"message": "Invalid Last name", "errorCode": "LNAME_INVALID"}
```

Note: If enter any empty values

```
{"message": "Invalid Phone Number", "errorCode": "PHONE_NUMBER_INVALID"}
```

Note: If enter any empty values or illegal value(string)

– On Update Contact

```
{"message": "Invalid First name", "errorCode": "FNAME_INVALID"}
```

Note: If enter any empty values

```
{"message": "Invalid Last name", "errorCode": "LNAME_INVALID"}
```

Note: If enter any empty values

```
{"message": "Invalid Phone Number", "errorCode": "PHONE_NUMBER_INVALID"}
```

Note: If enter any empty values or illegal value(string)

– Delete Contact

```
{"message": "Invalid Phone Number", "errorCode": "PHONE_NUMBER_INVALID"}
```

Note: If enter any empty values or illegal value(string)

Note:

For every Add / Update Extension, email will send to the concerned email-id

(Note: If Email-id provided on create/update, email will receive)

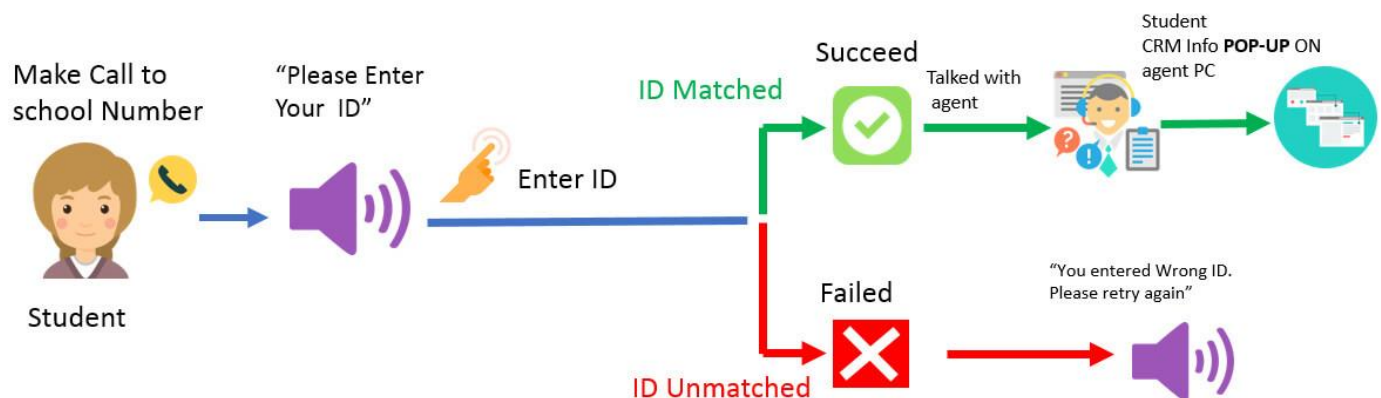
While deleting extension call recording and Voice mail recording will automatically backup in 'C' drive 'backup' folder.

On add/update/delete, we check with security key and it authenticate for every action.

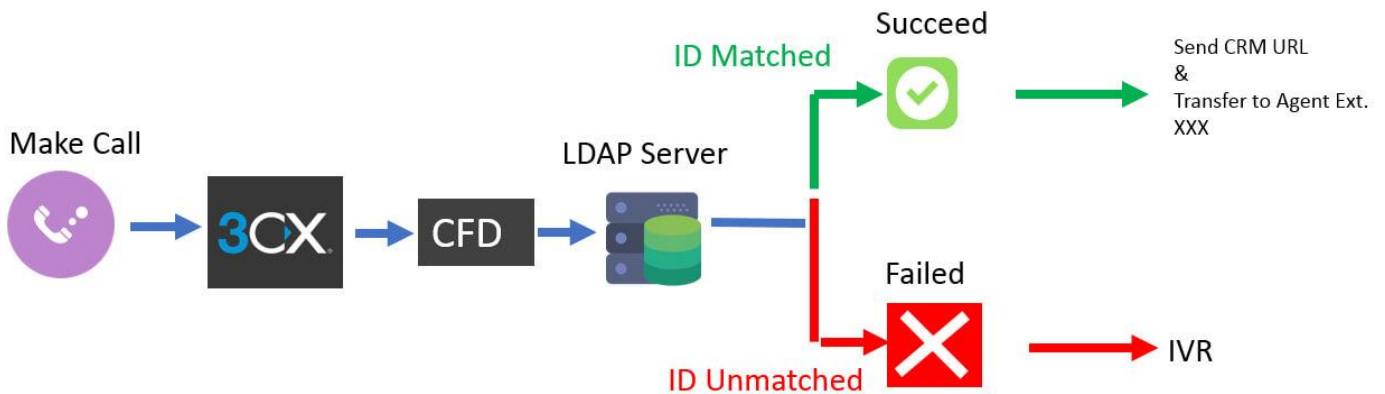
Save Security key in your application, while POST the Request send the security key as mentioned. Our system checks with security key and send the Response.

The following diagram shows you that how IVR allow callers to enter part of the student/staff number and the System use it to lookup all possible matches on user database in LDAP via Mr. VoIP Tool

User Action



Server Action



The incredibly fast rise of multiple applications of the VoIP, which allow the use of the smart call management system protocol without purchasing additional hardware, has been touted to revolutionize the communications industry.

MRVOIP custom softphone app will put on a leash to your phone system's high maintenance cost to an all-time low instantly.

The all-in-one softphone package covers all the needs of a new VoIP business covering all the major platforms, compatible with the latest SIP standards. The softphones are fully compatible with all VoIP servers, PBX or soft switch.

With freedom to use custom softphones that are compatible on many different platforms and mobile clients, one can have the most secure softphone applications running on multiple desktop/laptop and even smartphones from any part of the world as long as they are connected to internet. You can also customize to hide your caller ID from being seen by receivers.

Power packed features such as Video call, click 2 Dial, call recording, call transferring and Contact databases integration from your Outlook or Mac address books are among some of the notable features.

More advance variety of features beyond these basic capabilities is known as Unified Communication to support multi party video conferencing on smartphones and tablets are available in UC Clients only though.

If you are looking for apps that run on Windows, Mac, Linux, Android and iOS – you've come to the right place.

Talk to us today to find out more.



DESKTOP

User-friendly interface, HD audio & video, IM and more
Mr. VoIP is the newest of our softphone collection for Windows, macOS and Linux. The application has been designed with attention to detail, brand new UI that is easy to use and stays out of your way, so you can focus on what matters the most – the calls.

- ✓ Video
- ✓ Interface
- ✓ Contacts
- ✓ Click 2 Dial
- ✓ Intuitive
- ✓ Encryption

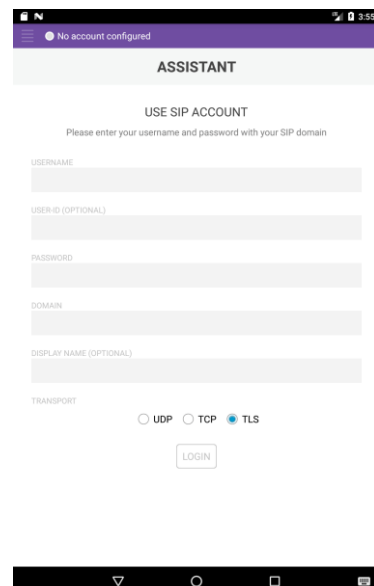
Available for: Windows, Mac and Linux

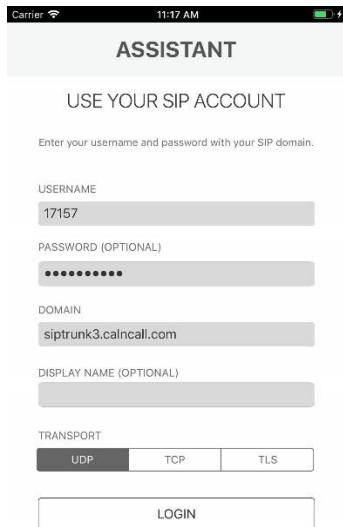
ANDROID

Now with completely redesigned user interface. The best quality on the market VoIP app for Android is here with new and improved battery saving techniques. Advanced business users will be happy to find out that all their favourite functions are still here.

Mr. VoIP is here to work for you anywhere, at any time, on any network!

Available for: Android





iOS

Excellent Audio and Video calls, Transfer and Conference functionalities paired with easy navigation, give any user the necessary tools for everyday tasks.

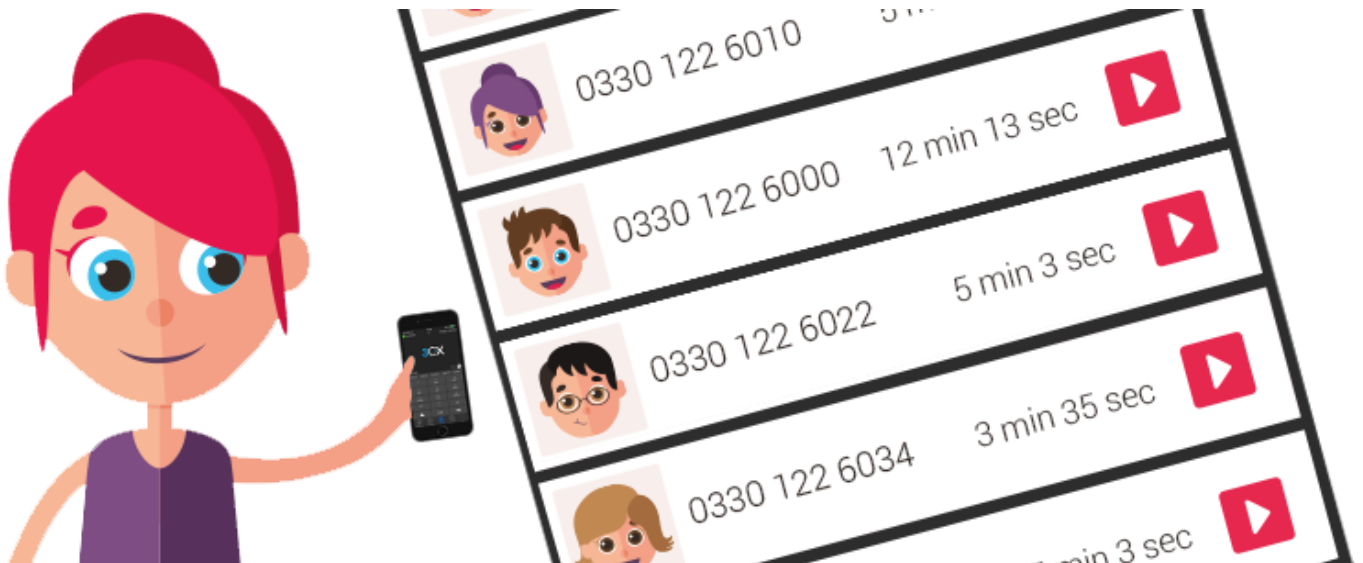
Baked with our own Mr. VoIP iOS SDK, the app is built with efficiency in mind, making battery use as little as possible thanks to an improved background app activity.

Available for: iOS



Call Recording via HTTP API

Mr. VoIP platform provides reliable Call Recording via HTTP API function to enable organisation to get individual copies of call recording saved directly to CRM from the 3CX server. The voice recording file can be renamed as per your need and saved in any locations preferred for future use.



Call recording via HTTP API is scoped to an individual call or conference call giving you the freedom to navigate directly from a call to recordings generated from that call with enforced security.

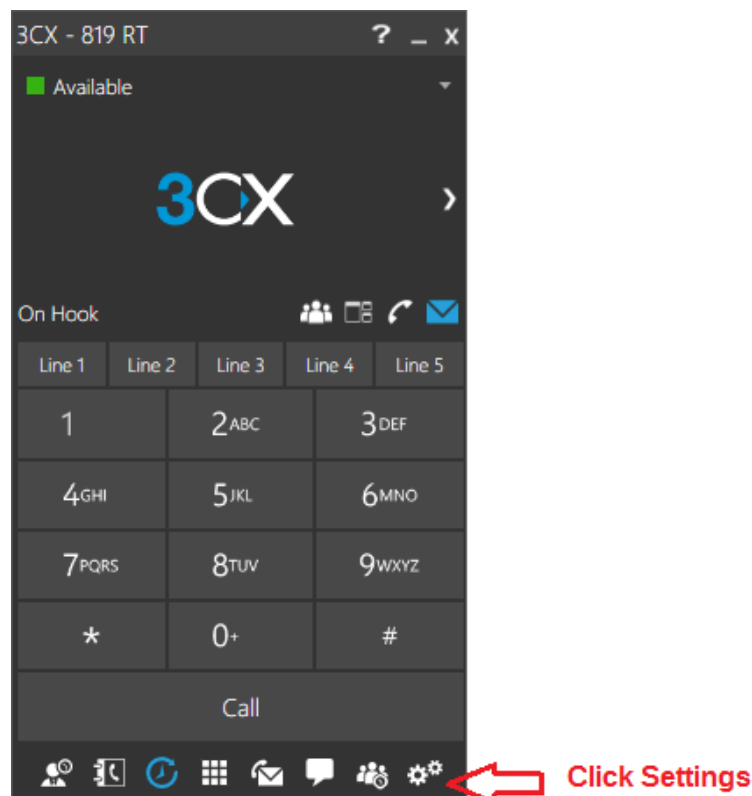
The best part of this entire feature is that you can integrate it to be fitted to your existing CRM for future reference when you would like to learn about the customer's activities for review.

Talk to us today to find out more.

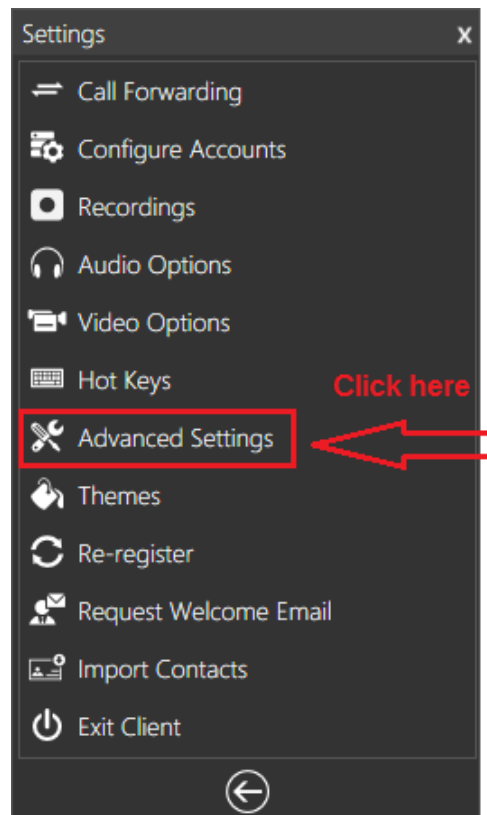
Call recording serves an important function in the 3CX service model because it provides opportunities to refer to old calls in the future. Our 3CX HTTP API comes with a call recording function that allows you to keep timely and easy-to-refer call details and configure various settings on your 3CX system.

Our enterprise edition of Mrvoip for 3CX clients goes beyond the standard call recording manager. We provide you with all the opportunities to manage, search, download, play, compress, archive, delete, and export you call records through just one easy-to-use portal. From better speed to superior call quality, managed disk space to MP3 file download option, Mrvoip is packed with a range of benefits.

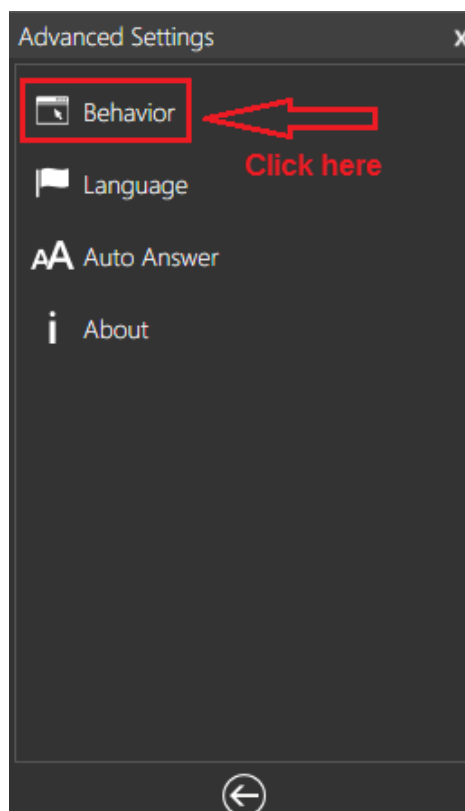
- 1) Open 3CX Client and click Settings (Shown in below Fig



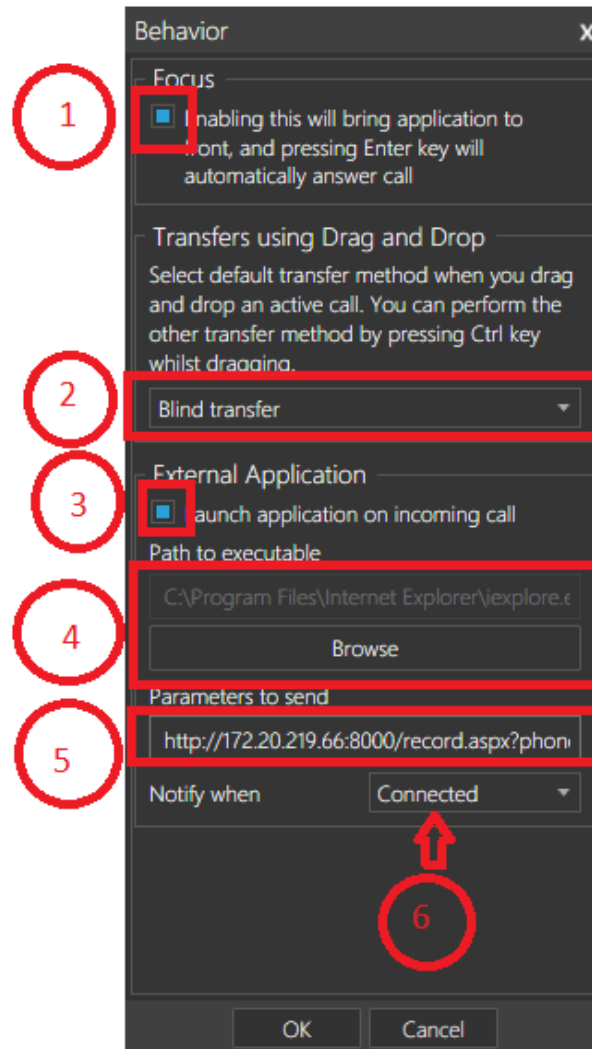
2) Click Advanced Settings (Shown in below Fig:)



3) Click Behavior (Shown in below Fig:)



4) In Behavior Panel follow the steps as per number shown below:

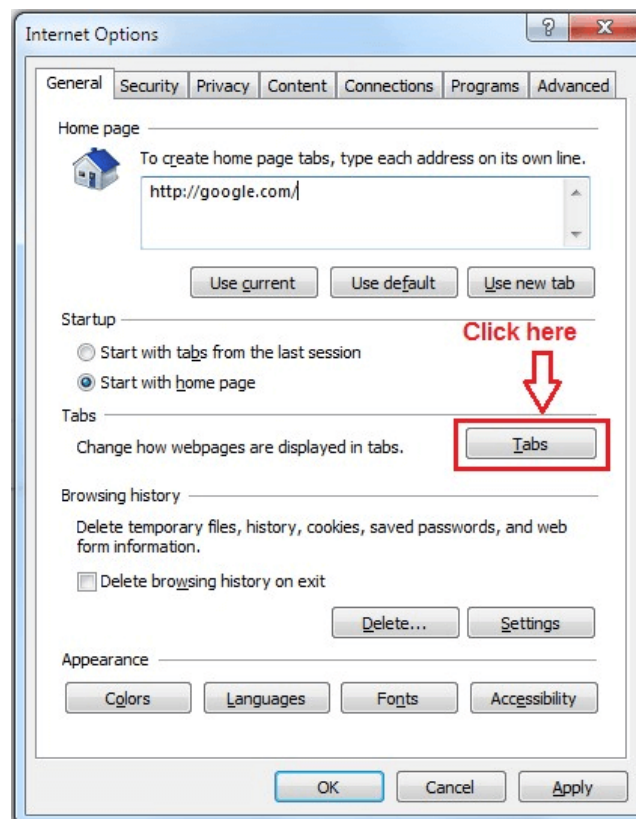


- ✓ Focus: Select Checkbox as per (Shown in below Fig:)
- ✓ Select Blind transfer as per (Shown in below Fig:)
- ✓ External Application: Select Checkbox as shown in fig.
- ✓ Choose your Browser e.g. Internet Explorer from the installed location (e.g.: C:\Program Files (x86)\Internet Explorer\iexplore.exe)
- ✓ Parameter to send: Copy paste the below url:
<https://172.20.219.66:8000/record.aspx?phoneNumber=%CallerNumber%&did=xxxxxx>

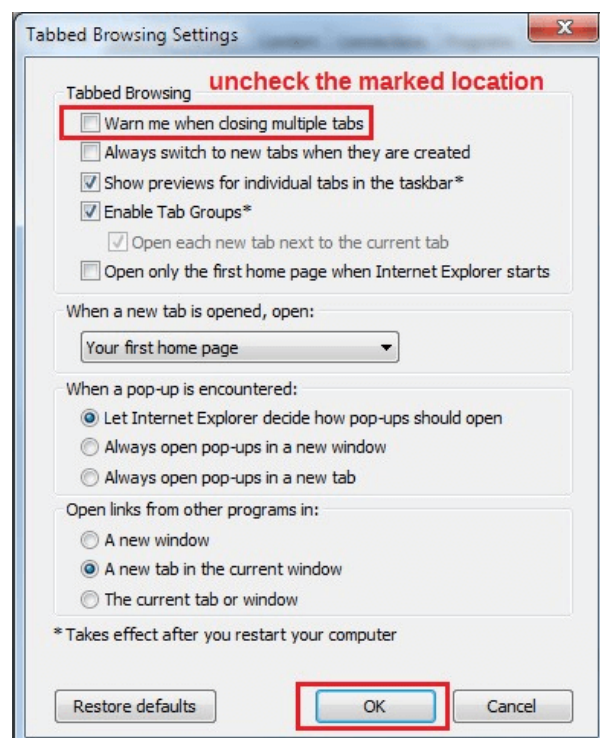
Note: You should change the did number (red color text) as per client Extension number for individual machine.

- ✓ Select Notify when as Connected
- ✓ Click Ok button

- 5) Open Internet Explorer Go to Tools > Internet Options > Click Tabs button (Shown in below Fig)



- 6) In Tabbed Browsing part, you need to un check the marked location and click OK button shown in Shown in below Fig:

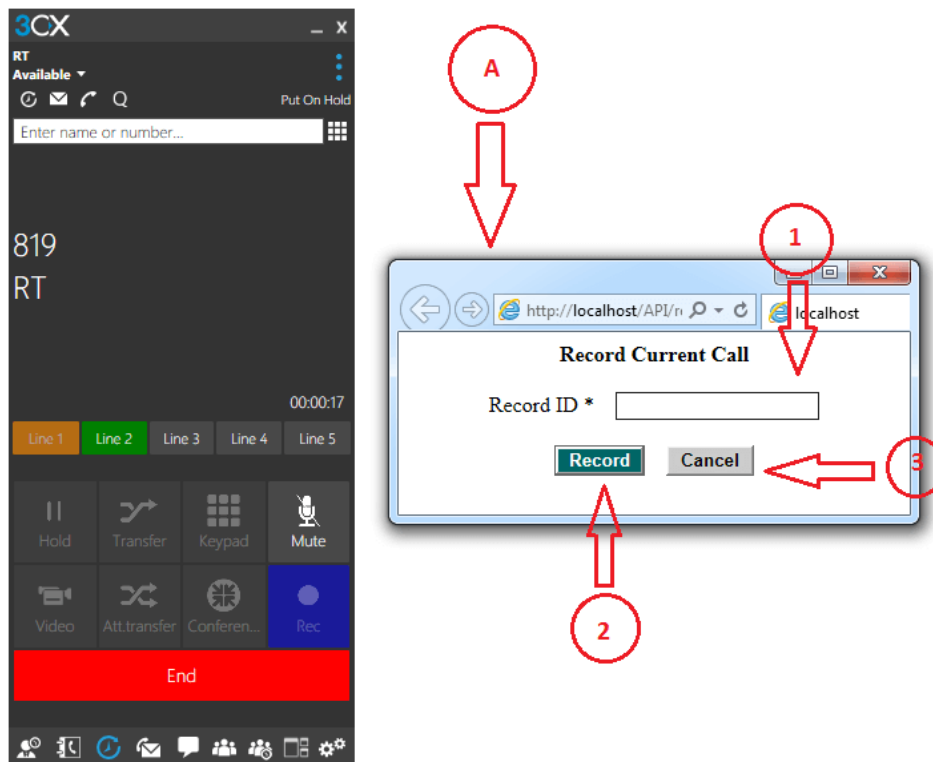


7) After attending the inbound call, **A** the popup window opens as shown in fig:)

1 If you want to record the specific call you can enter the Pin number (e.g: PIN256489556) and click

2 Record button as shown in fig:)

3 If you don't need to record the call, click cancel button to cancel button the recording as shown in the below fig:)



8) After call ends you can see the record file on the specific location that you have mentioned C:\Folder path

Agent Rating

When a customer is unhappy, they'd want to give feedback. MRVOIP very own agent post rating application lets them vent out their frustrations directly to you (luckily not to social media) giving you enough time to recover from the damage done and quickly resolve the issues at hand.

If you are driven by KPIs and Analytics, you cannot overlook the often ignored impact of feedback obtained from customers directly. MRVOIP agent post rating gives you first-hand information to learn what you are doing well and where you can improve. This could also turn out to be a fantastic tool when shared with your employees to help boost their morale or help to be better in future.

Learn about which employees are going out of their way to solve issues or merely churning through calls and chats. Get the information sent directly to your inbox daily or monthly for your reviews.



Gone are the days where the customer satisfaction results come in as watery and unreliable feedback leaving you clueless on what went wrong? Capture meaningful feedback from customers and start looking deeper at how your companies are being perceived by your customer in this real time agent post rating apps.

Talk to us today to find out more.

- Solution 1 -

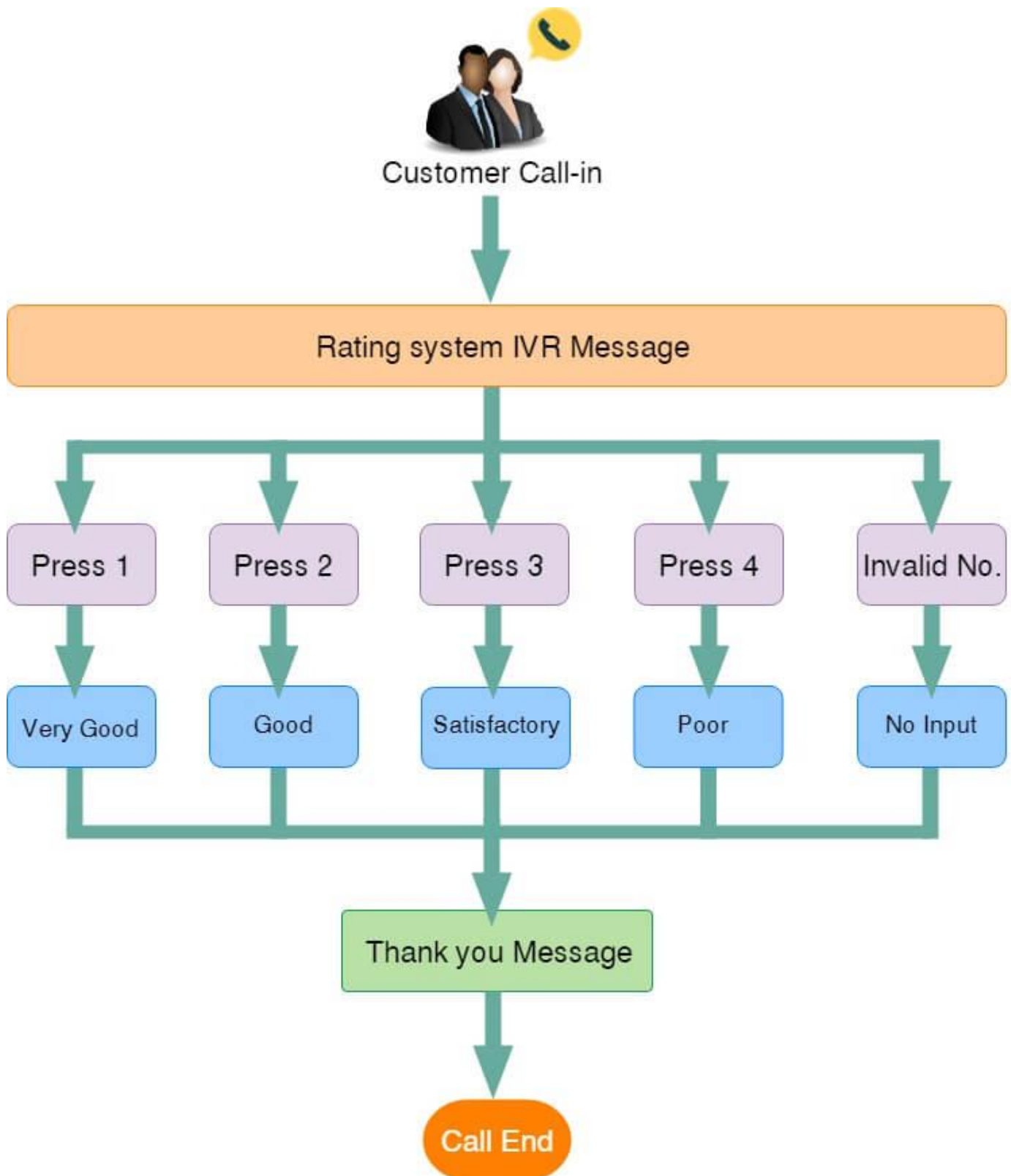
Our one of the Client promotes the adoption of fair, responsible and progressive employment practices among employers, employees and the general public of Singapore.

With mixture of 3cx could and Mr. VoIP widely helped them to achieve agent rating, As TAFEP is a critical mission to handle human resources as the major important on agent rating widely help them to understand the Agent Real-time performance.

Call Flow Details:

Once the agent finished their call conversation. They will transfer the calls to Rating system. Once transferred to rating system the system play greeting and ask for the rating for the agents. Based on the customer input the system will recognize and store the entry.

Call flow diagram:



Rating system Report Portal:

We have provided portal to see the call reports, I have attached login portal screen Once login you you can see all the Rating details which is posted by the customers.

Menu Options

You can below menu option which given based on customer requirement. We can customize the menu however you need.

Survey Report Page:

You can see all the ratted call details with agent name so we can analysis the agent statics. Also we have search option based on the date from, to Date & Agent name.

From

To

Agent Name

All

Search

Export

1

2

3

Filter & Search option Using Date & Agent Name...

S.No	Year	Month	Date Time	Caller-Id	Rating	Agent Name
Survey Report for All						
Customer Rating Date & Time			Customer Caller ID		Customer Rating from Agent	
Agent Name/Ext Number						
1	2018	MAR	19-03-2018 11:47 AM	██████████2	GOOD	603-██████ Lei
2	2018	MAR	19-03-2018 11:34 AM	██████████217	GOOD	603-██████ Lei
3	2018	MAR	19-03-2018 09:36 AM	██████████500	VERY GOOD	603-██████ Lei
4	2018	MAR	19-03-2018 09:09 AM	██████████35	GOOD	602-Lee ██████
5	2018	MAR	16-03-2018 12:02 PM	██████████32	GOOD	604-██████ Ang
6	2018	MAR	15-03-2018 04:57 PM	██████████05	GOOD	604-██████ Ang
7	2018	MAR	15-03-2018 03:09 PM	██████████44266	GOOD	604-██████ Ang
8	2018	MAR	14-03-2018 03:15 PM	██████████4244	GOOD	602-Lee ██████
9	2018	MAR	14-03-2018 12:55 PM	██████████322	VERY GOOD	604-██████ Ang
10	2018	MAR	14-03-2018 11:17 AM	██████████616	VERY GOOD	604-██████ Ang
11	2018	MAR	14-03-2018 10:36 AM	██████████345	VERY GOOD	604-██████ Ang
12	2018	MAR	14-03-2018 10:01 AM	██████████70384	VERY GOOD	604-██████ Ang
13	2018	MAR	13-03-2018 05:26 PM	██████████2155	GOOD	602-Lee ██████

Survey Summary:

You can see summary of ratting value and quality of percentage using overall percentage. You can analysis the summary of ratting using search function.

Tafep Summary
Dashboard / Survey Summary

SURVEY SUMMARY

From

To

Search
Export

Telephone Customer Survey - All		
Details	Nos	%
Callers rated VERY GOOD	535	61
Callers rated GOOD	235	27
Callers rated SATISFACTORY	81	9
Callers rated NO INPUT	15	2
Callers rated POOR	7	1
Total Nos of Calls Received	873	100

Total Number Of Rattings by Customer

Agent Map

You can assign agent name based on the agent extension number who is transfer to the Rating system. So we can see the name on the report page. Admin can control this page.

Agent Map Dashboard /

LIST OF AGENT NAME

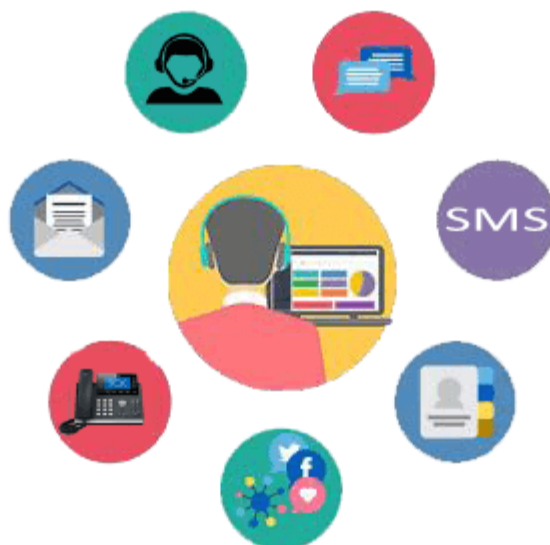
[Add New Agent](#)

S.No	DINS	Agent Name	Action
1	501	601 [REDACTED]	Edit Delete
2	502	602 [REDACTED]	Edit Delete
3	503	603 [REDACTED]	Edit Delete
4	504	604 [REDACTED]	Edit Delete
5	505	605	Edit Delete
6	506	606 [REDACTED]	Edit Delete



CTI & WEBRTC

MRVOIP CTI & WebRTC is an essential feature that allows connection of the telephone system to the computers/servers based on certain parameters stored in the customer databases using the caller ID (CLI) or automatic number identification (ANI) functions.



With the advent of automatic call distribution, computer telephony integration (CTI) quickly became a popular implementation among organizations that is always looking at improving the efficiency of their call center agents and sales department. Gone are the days where organizations are required to install expensive devices on premise that is not cost efficient. MRVOIP CTI & WebRTC can be easily deployed and managed in the cloud.

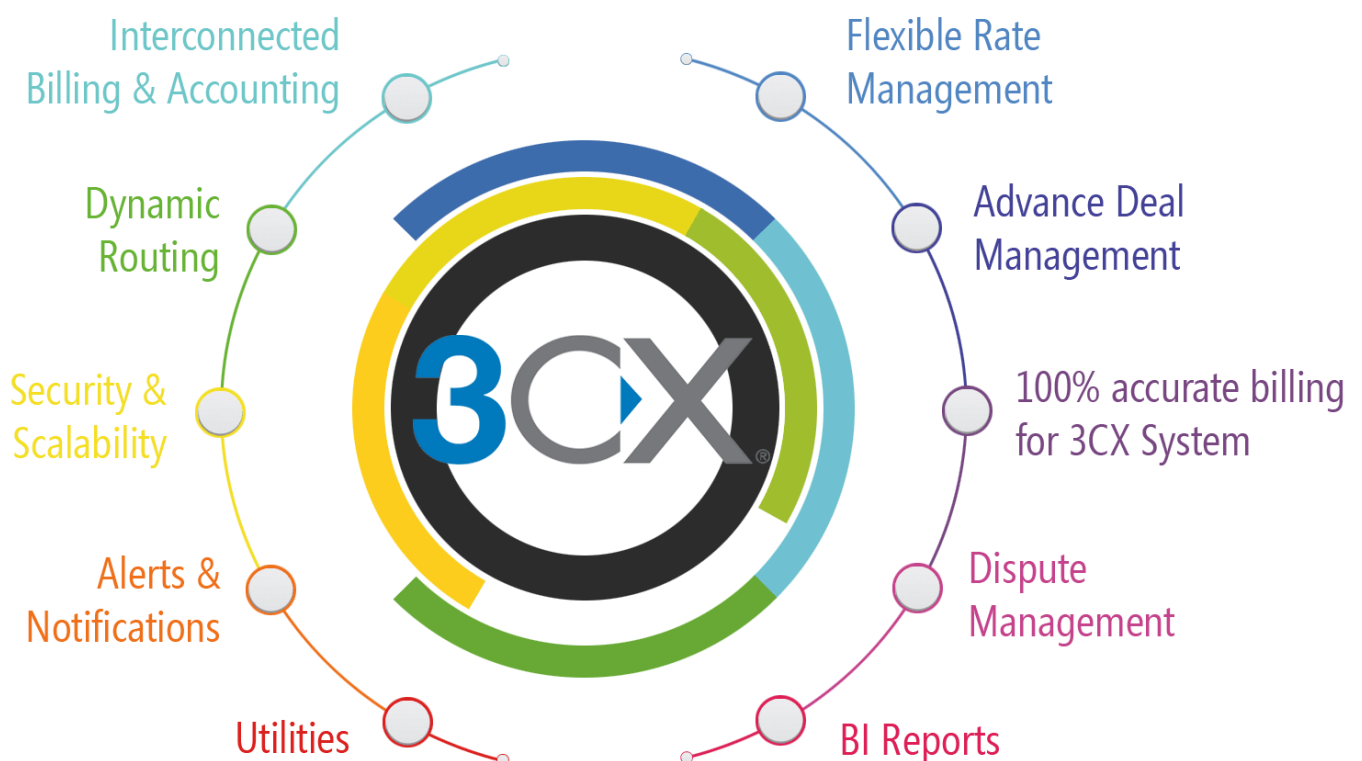
CTI removes the hassle of manual dialing, which is cumbersome and wastes time. Not only that, it also increases the use of CRM by the automatic logging and tracking of incoming calls making it easier to review calls and sales activities to increase the performance of the organization.

WebRTC initiates the user to communicate directly from the web browser by using just the internet as the communication media hence other traditional communication unit such as PBX becomes obsolete. Users can expect a seamless voice, video and data sent from within a browser to another recipient's browser in real time without having to use plug-ins or webcam devices.

Talk to us today to find out more.



Billing Solutions



Thrive into the digital economy wonderland with Mr. VoIP billing software and let us take care of the behind the scene issues when it comes to issuing that important purchase orders, invoices and delivery orders to your customers. You can have it anyway that you want; from the simplest to the most complex billing process, our billing platform will provide an all-inclusive solution for any industry because it is very easy to use and implement.

The built-in flexibility of our billing solution will allow for full customization of the process to fit your specific needs as we strive to ensure that you are maximizing your revenue with efficient reporting on billing, collections and revenues.

However simple or complex your setup maybe, you can always request us to design an extremely flexible and highly customizable solution to seamlessly integrate with the rest of you in house system.

Get the supports you can always count on by streamlining your billing process making it a single point integrated billing system.

Talk to us today to find out more.



Wallboard Customization

Imagine having a personalized wallboard displaying timely data of your ticketing system, CRM, website contents, videos or just about any other information you may need in one place. You can have it all now with MRVOIP wallboard customization features.

Having a custom wallboard is particularly useful to contact center agents, supervisors and managers. The convenience of knowing the number of calls in the queue, call priority and how long a call has been placed on hold in real time has been proven to improve any contact center performance.

The benefit of having this visual communication tool configured based on team or group based will ensure only the most useful data shown at all times. For example, a contact center manager's wallboard will display all real time data that is different from the data shown on the large display screen to agents. Color coding also plays a major role in differentiating agents and contact center teams performance.

You can also choose to configure it to be displayed at agent's desktop, accessible through web browsers using mobile devices remotely or on a large plasma screen right in the heart of your contact center.

Take charge of your wallboards today to ensure you are only creating a wallboard that displays key metrics and targets that are achievable and actionable.

Talk to us today to find out more.

Wallboard



Active Trunk calls



Active Queue calls



3CX – Real – Time Dashboard

Real – Time – Calculation / Definitions		
Field Name	Display Format	Calculation / Definitions
Skill Name	Text	Name of the Queue/Skill
Calls In Queue	Numeric	Total Number Of Calls in Queue
Oldest Q Call	[HH:MM:SS]	Total time that this call is in queue
Agent Staffed	Numeric	Total Agents Logged
Staff Available	Numeric	Total Agents ready to answer calls
Staff on ACD	Numeric	Total Agents on call
Offered Calls	Numeric	Total Calls Offered
ACD Calls	Numeric	Total Calls Answered
Service Level	%	Calls Answered in SL Threshold / (Calls Offered – Abandoned with in SL Threshold)
ACD Calls in SL	Numeric	Total Calls Answered with in Threshold
Aban Calls	Numeric	Total Calls abandoned after coming to queue
Aban Calls out of SL	Numeric	Total Number of calls abandoned after coming defined Seconds

- Above image indicates the required basic Real-Time monitoring parameters in a ACD Dashboard.
- We could not find the parameters highlighted in Orange Background or those are missing in 3CX Dashboard.
- Without the above fields, monitoring/measuring the call center performance is challenging for operations team.
- Since the above crucial parameters are missing from 3CX Dashboard, the recovery of lost KPIs is a tedious process operations team.
- The alternate solution is to export the raw data from 3CX often, and populate in an excel template to find out the usual performance, of the call center and take necessary actions in case the targets / KPIs were not met.

Real-Time Monitoring View (Sample)

Statistics by Queue / Skill													
Country	Calls In Queue	Staff Avail	Staff on ACD	Agent Staffed	Offered Call	ACD Calls	SL % 70:30	ACD Calls in SL	Total Abandoned Calls	Abandoned >30 seconds	Avg. Hold	Avg. Talk	Avg. Handle Time
Summary	2	2	0	2	4	1	100%	3	0	0	12	12	12
Queue / Skill 1	1	1	0	1	1	1	100%	2	0	0	12	12	12
Queue / Skill 2	1	1	0	1	1	1	100%	1	0	0	12	12	12

A red circular icon containing a grid of small squares, with a red arrow pointing from the grid towards the right.

Predictive Dialer

MRVOIP Predictive Dialer app is a scalable solution that works for all business sizes and includes reporting analytics. Since the predictive dialer works through cloud integration, so your software will be automatically updated to ensure you get real time data. In that way, you can monitor your rep behavior and implement improvement strategies with built-in analytics and reporting.



The dialer brings together calling technology and sales enablement programs to help companies call as many leads as possible while ensuring its compliant and legal at all times.

The dialer compares potential leads list against internal whitelist data and blacklist data category before commencing with the dialing. This feature will significantly reduce downtime between calls and capture higher customer response rates.

Due to its flexible features, the dialer is able to redirect calls to the most appropriate rep with the right skillset and availability can be accomplished easily.

MRVOIP promises 300% improvement in call time over manual dialing and it can even be accessible by your mobile workforce from anywhere. With a combined inbound/outbound system that keeps lines available for inbound calls while your reps call out, you will never miss a warm lead or follow up. Calls can also be recorded for compliance and training.

Talk to us today to find out more.



Custom CRM Integration

MRVOIP Custom CRM allows business of any size to build and deliver a new in house CRM based on the exact requirements wanted on time and on budget. Custom CRM comes with the ability to expand at any time as new needs are recognized, without having to completely dismantle existing workflows. The customized CRM also allows integration with other solutions and in-house software to provide a harmonized integration across multiple departments.

Businesses deem CRM as a valuable asset as it ensures the overall movement of the business operation is smooth and in order. You can now have your own customized application instead of getting a pre-built CRM which are usually created too many functions and features which may not be relevant to your organization. Not only it is too complex, the complexity is costly in both time and money for you.

From sales to customer service and to billing to technical support, your daily operations can run more efficiently when the system is integrated across multiple departments.

Talk to us today to find out more.

POPULAR SYSTEM OF RECORDS INTEGRATIONS





Custom Reporting

Get helpful reports to drive accountability and track ROI benefits with MRVOIP custom reporting that caters just the right metrics at the right time providing global visibility of the environment of your organisation is currently in. Custom reporting will always ensure your organisation is best using the scarce time of your agents and consumers while measuring scheduled adherence. This reporting metrics can help you make sure your company's time is being effectively used while enhancing workplace productivity and the overall customer experience.



It's very easy to visualize the full adoption of your organisation's performance when you have access to real time report modules that comes with advanced search criteria that can be obtained on weekly or monthly basis. In order to truly benefit from custom reporting, MRVOIP listens to your requirements closely and begins to personalize the reports to meet the standards you want. As there is no one size fits all answer, MRVOIP custom reporting categorizes the reports to meet the best practice standards defined by industry experts. Talk to us today to find out more.

Looking for an easy and effective way to review your call logs and generate call reports? Perhaps Mrvoip can help you. Our custom reporting solution provides in-depth data on your inbound and outbound calls and generates reports from 3CX and CRM. You can filter out specific calls from your call log and analyse them with the help of our custom reporting solution.

We send out call reports on an ad-hoc basis or schedule them on specific days of the week. You can receive your call reports through email in various formats, such as HTML, PFD, CSV, XML and rich text format. You can use your softphone or VOIP phone to get detailed customized call reports right at your fingertips.

Agent – Calculation / Definitions

Field Name	Display Format	Calculation / Definitions
Agent Name	Text	Report Data Date

Agent – Calculation / Definitions		
Field Name	Display Format	Calculation / Definitions
Agent ID	Numeric	ID of the Agent based on System
Ans. Calls	Numeric	Total Calls Answered
Total Talk Time	[hh:mm:ss]	Total Talk Time
Total ACW Time	[hh:mm:ss]	Total Wrap Time
Total Hold Time	[hh:mm:ss]	Total Hold Time
Held Calls	Numeric	Total answered calls that were placed on hold by this agent
Ext In Calls	Numeric	Total calls answered with in call center Extensions
Total Ext In Time	[hh:mm:ss]	Total Time Spend with in call center Extensions answered calls
Ext Out Calls	Numeric	Total with in call center Extensions out Calls
Total Ext Out Time	[hh:mm:ss]	Total Time Spend with in call center Extensions out calls
OB Calls	Numeric	Total Number of Outbound Calls
Total OB Time	[hh:mm:ss]	Total time of (OB Talk Time + OB Hold Time + OB ACW Time)
Total Availbale Time	[hh:mm:ss]	Total time of an agent
AUX Time	[hh:mm:ss]	Total time spent on AUX by each agent
Break Down of each AUX Time	[hh:mm:ss]	Total time spent on each AUX code, by each agent and by day
Staffed Time	[hh:mm:ss]	Log-in time spent on an ID, irrespective of multiple log-ins

- Above image indicates the basic agent reporting fields required in historical and in real-time.
- We could not find the parameters highlighted or those are missing in 3CX.
- Without those fields, monitoring/measuring the agent's Productivity, Occupancy, utilization is not feasible.

- Since the above parameters are not available, Operations, may loose on agent's productivity and adherence.
- The alternate is to track the information manually in an excel, which is time consuming, waste of productivity may be inaccurate.

Call by Call Inbound -Calcualtion / Definitions		
Field Name	Display Format	Calculation / Definitions
Call ID	Numeric	Unique ID Tagged to each all
Date	[DD/MM/YYYY]	Report Data date
Start Time	[hh:mm:ss]	Start time of this call/even
End Time	[hh:mm:ss]	End time of this call/even
Calling Party	Numeric	CLI
Disposition Time	[hh:mm:ss]	Event Time
QUEUE	Alphabetic	The Queue name, which caller opted in IVR
Transferred to Queue	Alphabetic	Whether the call was transferred from IVR to Agent (Y / N)
Transferred to Agent	Alphabetic	Whether the call was transferred from Queue to Agent (Y / N)
Call Status	Alphabetic	Whether the call was answered, adandoned or diconnected (Ans. / Abn. /Disc.)
Agent ID	Numeric	An Specific ID of that agent who attended the call
Agent Status	Alphabetic	what was the status of agent at this instance
Talk Time	[hh:mm:ss]	Only Talk Time of that call(inbound or outbound)
Hold Time	[hh:mm:ss]	Only Hold Time of that call(inbound or outbound)
ACW Time	[hh:mm:ss]	Only Wrap Time associated or not associated to call

Call by Call Inbound -Calcualtion / Definitions

Field Name	Display Format	Calculation / Definitions
Trans Out	Alphabetic	Whether the call was transferred (Y / N)
Transfer Out Number	Numeric	If the call was transferred, what was the number dialled to transfer
Release	Alphabetic	Whether the agent released the call(Y / N)
Conference	Numeric	Whether the call was conferenced.

- The Above listed parameters are required in an individual call activity report.
- We could not find the parameters highlighted or those are missing in 3CX historical data.
- Without those missing fields, Call Analysis / Evalution is not feasible, incase of escalations or guest behaviour.

3CX – Outbound Reporting Parameters

Calculation / Definitions		
Measurement Type	Display Format	Description
Outbound Calls	Numeric	Number of Outbound Calls
Total OB Talk Time	[hh:mm:ss]	Total Outbound Talk time
Total OB Wrap Time	[mm:ss]	Total Outbound Wrap time
Total OB Hold Time	[mm:ss]	Total Outbound Hold time
Average ACW Handle Time	[mm:ss]	ACW Time divided by ACW Calls
Average Hold Handle Time	[mm:ss]	Total Hold Time divided by Held Calls
Average Outbound Time	[mm:ss]	Outbound Time divided by Outbound Calls

Calculation / Definitions		
Measurement Type	Display Format	Description
Ext In Calls	Numeric	Calls answered with in call center Extensions
Avg Ext In Time	[mm:ss]	Average Time spend on answered calls with in call center Extensions
Avg OB Time	[mm:ss]	(Wrap Time + Talk Time + Hold Time) divided by total of Outbound Calls
Staffed Time	[h:mm:ss]	Log-in time of an ID, irrespective of multiple log-ins
Ext Out Calls	Numeric	Total Calls dialled out from extensions(included all dialled numbers)

- Above Image indicates the required basic outbound reporting criteria.
- We could not find the parameters highlighted or those are missing in 3CX.
- Without those fields, monitoring/measuring the outbound activity is not feasible.
- With non-accessibility of measuring the above KPI's, operations may loose on agent's productivity and adherence
- The only alternate is to track the information manually, which is time consuming and may lead to inaccuracy.

Reports

Reports-2

Profile

Logout

Search Details

Select Skill Number

0002

Select Month

Jan

Select Year

2017

Aband Limit Sec

Search

Excel Export

Date	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Calls Offered	0	1	3	5	0	1	0	0	7	5	1	0	0	0	0	1	0	1	1	3	0	0	0	1	4	1	4	0	0	0	1	
Calls Answered ACD	0	0	3	0	0	1	0	0	7	5	1	0	0	0	0	1	0	1	1	3	0	0	0	1	4	1	2	0	0	0	1	
Calls Answered ACD w/n 15 Sec	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
Calls Answered ACD after 15 Sec	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
Calls ABN	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
ABN After 15 Sec	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0		
Flew Out																																
% ACD Within SLA	0	100	100			100			100	100	100					100		100	100	100	100				100	100	100	50			100	
% Calls ABN After 15 Sec	100	0	0			0			0	0	0					0		0	0	0				0	0	0	50			0		
Avg Speed of Answer(ASA)	00:00:00	00:00:03	00:00:07			00:00:05			00:00:08	00:00:06	00:00:04				00:00:03		00:00:05	00:00:04	00:00:06					00:00:05	00:00:04	00:00:03	00:00:03				00:00:05	
Avg Talk Time	00:00:00	00:02:14	00:03:56			00:02:10			00:02:25	00:02:35	00:02:20				00:02:31		00:01:50	00:04:40	00:04:25					00:03:30	00:01:40	00:04:02	00:02:32				00:01:52	
Avg ACW (After Call Work)																																
Maximum Wait Time	00:00:00.53	00:00:23.56	00:00:33.72			00:00:19.66			00:00:38.27	00:00:29.41	00:00:18.76				00:00:18.05		00:00:19.80	00:00:19.50	00:00:24.46					00:00:19.76	00:00:20.35	00:00:17.81	00:00:18.00				00:00:19.52	
Extn Out Calls	0	0	43	19	19	19	0	0	25	34	12	10	7	0	8	22	12	16	21	12	0	0	22	16	25	3	16	0	0	0	18	
Avg Ext Out Time			00:02:05	00:04:33	00:01:53	00:03:11			00:01:44	00:01:50	00:01:58	00:01:47	00:02:13		00:02:23	00:03:28	00:02:44	00:02:53	00:04:54				00:02:40	00:03:11	00:02:16	00:01:55	00:01:23				00:01:47	
Avg Call Serve Time			00:02:16	00:03:58		00:03:12			00:02:27	00:02:38	00:02:22				00:02:33		00:01:52	00:04:42	00:04:28					00:03:32	00:01:42	00:04:04	00:02:34				00:01:54	

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Reports

Reports-2

Profile

Logout

Search Details

Skill Number

Date

20/06/2017

Aband Limit Sec

Search

Excel Export

Skill Number	Date	Calls Offered	Calls Answered ACD	Avg Speed of Ans(ASA)	Calls ABN	ABN after 15 Secs	% Calls ABN after 15 Secs	Avg Aband Time	Avg Talk Time	Voice Mail	% ACD Within SLA	Avg ACW (After Call Work)
Ad-hoc Support_EC(8003)	2017-06-20	2	2	00:00:00	0	0	0	00:00:00	00:00:00	0	0	
Ad-hoc Support_NC(8004)	2017-06-20	1	1	00:00:00	0	0	0	00:00:00	00:00:00	0	0	
Ad-hoc Support		3	3		0	0	0					
Lenovo Support_NC(8005)	2017-06-20	2	2	00:00:00	0	0	0	00:00:00	00:00:00	0	0	
Lenovo Support_EC(8006)	2017-06-20	1	1	00:00:00	0	0	0	00:00:00	00:00:00	0	0	
Lenovo Support		3	3		0	0	0					

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Call Flow Designer (CFD)

With the 3CX Call Flow Designer (CFD) you can easily create complex call flows and voice applications visually – without programming or scripting. For example, query a caller for a customer number, validate this number against a database and route the call based on customer type. Or create a call flow that routes calls based on time of day.

Automate repetitive tasks and save valuable agent and customer time!

Powerful Call Flow Building blocks

The Call Flow Designer includes ready to use building blocks that you can use in your call flows:

- Playback
- Menu
- User input
- Record
- Disconnect
- Transfer
- Database Access
- Email sender
- Read / Write to File
- Code execution
- HTTP Requests
- Sockets

Some of sample application

Some example call flows:

- Route calls based on time of day
- Direct calls based on customer input
- Validate customer data against a database
- Call surveys
- Implement a Voice Payment gateway
- Callback scheduler
- Automatic outbound dialer – call numbers and distribute to agents

- END -